=> d his ful

```
(FILE 'CAPLUS' ENTERED AT 09:28:55 ON 17 APR 2006)
                DEL HIS Y
L1
          18950 SEA ABB=ON PLU=ON ANTIBODIES/OBI AND IMMUNOGLOBULINS/CT
         132838 SEA ABB=ON PLU=ON ANTIBODIES/CT
L2
         66872 SEA ABB=ON PLU=ON IMMUNOGLOBULINS/CT
L3
         185751 SEA ABB=ON PLU=ON (L1 OR L2 OR L3)
                E ANTIBODIES AND IMMUNOGLOBULINS/CT
                E E3
         77415 SEA ABB=ON PLU=ON "ANTIBODIES AND IMMUNOGLOBULINS"/CT
L5
        263165 SEA ABB=ON PLU=ON L5 OR L2 OR L3
L6
         87507 SEA ABB=ON PLU=ON L6 (L) (PREP OR BPN OR SPN OR DGN OR THU
L7
                OR USES )/RL
          8253 SEA ABB=ON PLU=ON L7 (L) (RECOMBIN?/OBI OR CHIMER?/OBI OR
L8
                HUMANI?/OBI)
L9
           4850 SEA ABB=ON PLU=ON CDR#/BI
L10
           373 SEA ABB=ON PLU=ON L8 AND L9
            46 SEA ABB=ON PLU=ON L8 (L) L9
L11
           2649 SEA ABB=ON PLU=ON (CDR1 OR CDR2 OR CDR3)/BI
L12
            94 SEA ABB=ON PLU=ON L12 AND L8
L13
           130 SEA ABB=ON PLU=ON L11 OR L13
L14
         14623 SEA ABB=ON PLU=ON HEAVY CHAIN/OBI
L15
         25301 SEA ABB=ON PLU=ON LIGHT CHAIN/OBI
L16
         252321 SEA ABB=ON PLU=ON PROTEIN SEQUENCE#/OBI
L17
         1100 SEA ABB=ON PLU=ON (ANTIGEN BIND? SITE)/BI
L18
              9 SEA ABB=ON PLU=ON L18 AND L14
L19
                D SCAN TI
       93965 SEA ABB=ON PLU=ON BIOMARKER#/OBI OR MARKER#/OBI
L20
             8 SEA ABB=ON PLU=ON L20 AND L14
L21
          19544 SEA ABB=ON PLU=ON CANCER/OBI (L) DIAGNOS?/OBI
L22
         17 SEA ABB=ON PLU=ON L22 AND L14
L23
             4 SEA ABB=ON PLU=ON L23 AND L20
L24
            13 SEA ABB=ON PLU=ON L19 OR L24
L25
           92 SEA ABB=ON PLU=ON L17 AND L14
L26
L27
            92 SEA ABB=ON PLU=ON L26 AND ((L16 OR L17))
             7 SEA ABB=ON PLU=ON L18 AND L27
L28
            13 SEA ABB=ON PLU=ON L25 OR L28
L29
          87360 SEA ABB=ON PLU=ON VECTOR?/OBI
L30
            36 SEA ABB=ON PLU=ON L14 AND L30
L31
             25 SEA ABB=ON PLU=ON L31 AND ((L15 OR L16) OR L22 OR L20)
L32
L33
             22 SEA ABB=ON PLU=ON L32 NOT L29
L34 656043 SEA ABB=ON PLU=ON DNA/OBI OR CDNA/OBI OR NUCLEIC ACID/OBI
         19 SEA ABB=ON PLU=ON L33 AND L34
L35
            32 SEA ABB=ON PLU=ON L35 OR L29
L36
            77 SEA ABB=ON PLU=ON BOLHUIS R?/AU
L37
            9 SEA ABB=ON PLU=ON WOEHL T?/AU
L38
           26 SEA ABB=ON PLU=ON BOETTGER V?/AU
L39
          110 SEA ABB=ON PLU=ON (L37 OR L38 OR L39)
L40
           110 SEA ABB=ON PLU=ON (L37 OR L38 OR L39)

1 SEA ABB=ON PLU=ON L40 AND L10

1 SEA ABB=ON PLU=ON L41 AND L9

1 SEA ABB=ON PLU=ON L41 OR L42

16 SEA ABB=ON PLU=ON L7 AND L40

2 SEA ABB=ON PLU=ON L44 AND (L20 OR L22)

--- 2 SEA ABB=ON PLU=ON L43 OR L45
L41
L42
L43
L44
L45
L46
                D SCAN
           287 SEA ABB=ON PLU=ON L8 AND L20 AND L22
L47
           260 SEA ABB=ON PLU=ON L47 AND L34
L48
           3726 SEA ABB=ON PLU=ON L15 AND L16
L49
L50
            37 SEA ABB=ON PLU=ON L48 AND L49
```

```
L51
            37 SEA ABB=ON PLU=ON L50 AND L17
            0 SEA ABB=ON PLU=ON L51 AND L18
L52
             0 SEA ABB=ON PLU=ON L52 AND L9
L53
L54
             5 SEA ABB=ON PLU=ON L51 AND L9
L55
            35 SEA ABB=ON PLU=ON L54 OR L36
L57
             1 SEA ABB=ON PLU=ON L46 NOT L55
     FILE 'BIOSIS' ENTERED AT 10:23:42 ON 17 APR 2006
        354629 SEA ABB=ON PLU=ON ANTIBOD?/TI,IT
L58
L59
        148790 SEA ABB=ON PLU=ON IMMUNOGLOBULIN?/TI,IT
           2488 SEA ABB=ON PLU=ON CDR1 OR CDR2 OR CDR3
L60
        460412 SEA ABB=ON PLU=ON L58 OR L59
L61
            996 SEA ABB=ON PLU=ON L60 AND L61
L62
           728 SEA ABB=ON PLU=ON L62 AND (CHIMER? OR RECOMBIN? OR HUMAN?)
L63
        318259 SEA ABB=ON PLU=ON MARKER? OR BIOMARKER?
L64
            34 SEA ABB=ON PLU=ON L63 AND L64
L65
             1 SEA ABB=ON PLU=ON CANCER AND L65
L66
               D SCAN
         22617 SEA ABB=ON PLU=ON LIGHT CHAIN
L67
         25751 SEA ABB=ON PLU=ON HEAVY CHAIN
L68
            18 SEA ABB=ON PLU=ON L65 AND ((L67 OR L68))
L69
         11770 SEA ABB=ON PLU=ON PROTEIN SEQUENCE
L70
        1201460 SEA ABB=ON PLU=ON (DNA OR CDNA OR NUCLEIC ACID)
L71
             0 SEA ABB=ON PLU=ON L69 AND (L70 AND L71)
L72
             8 SEA ABB=ON PLU=ON L69 AND (L70 OR L71)
L73
            848 SEA ABB=ON PLU=ON ANTIGEN BIND? SITE
L74
L75
             1 SEA ABB=ON PLU=ON L65 AND L74
         47654 SEA ABB=ON PLU=ON HOST (4A) CELL OR ANIMAL (4A) HOST
L76
             1 SEA ABB=ON PLU=ON L65 AND L76
L77
               D SCAN
            10 SEA ABB=ON PLU=ON L66 OR L73 OR L75 OR L77
L78
               E BOLHUIS R?/AU
             37 SEA ABB=ON PLU=ON ("BOLHUIS REINDER"/AU OR "BOLHUIS REINDER
L79
               I H"/AU OR "BOLHUIS REINDER L"/AU OR "BOLHUIS REINDER L H"/AU
               OR "BOLHUIS REINER L H"/AU OR "BOLHUIS REINIER L H"/AU)
               E WOEHL T?/AU
             9 SEA ABB=ON PLU=ON "WOEHL THORSTEN"/AU
L80
               E BOETTGER V?/AU
             7 SEA ABB=ON PLU=ON "BOETTGER VOLKER"/AU
L81
            53 SEA ABB=ON PLU=ON (L79 OR L80 OR L81)
L82
            21 SEA ABB=ON PLU=ON L82 AND L61
L83
            O SEA ABB=ON PLU=ON L83 AND L63
L84
            18 SEA ABB=ON PLU=ON L83 AND (CHIMER? OR HUMAN? OR RECOMBIN? OR
L85
               VECTOR?)
             0 SEA ABB=ON PLU=ON L85 AND L64
L86
             9 SEA ABB=ON PLU=ON L85 AND CANCER
L87
             1 SEA ABB=ON PLU=ON L85 AND ((L67 OR L68))
L88
             O SEA ABB=ON PLU=ON HOST AND L85
L89
L90
            10 SEA ABB=ON PLU=ON (L87 OR L88)
            10 SEA ABB=ON PLU=ON L90 NOT L78
L91
     FILE 'MEDLINE' ENTERED AT 10:35:25 ON 17 APR 2006
               E BOLHUIS R?/AU
             10 SEA ABB=ON PLU=ON ("BOLHUIS REINDER"/AU OR "BOLHUIS REINDER
L92
               L"/AU OR "BOLHUIS REINDER L H"/AU OR "BOLHUIS REINIER L H"/AU)
     FILE 'CAPLUS, BIOSIS' ENTERED AT 10:36:09 ON 17 APR 2006
             45 DUP REM L55 L78 (0 DUPLICATES REMOVED)
L93
                    ANSWERS '1-35' FROM FILE CAPLUS
                    ANSWERS '36-45' FROM FILE BIOSIS
```

L94

11 DUP REM L57 L91 (0 DUPLICATES REMOVED)
ANSWER '1' FROM FILE CAPLUS
ANSWERS '2-11' FROM FILE BIOSIS

=> fil caplus biosis FILE 'CAPLUS' ENTERED AT 10:36:52 ON 17 APR 2006 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'BIOSIS' ENTERED AT 10:36:52 ON 17 APR 2006 Copyright (c) 2006 The Thomson Corporation

```
=> d que 193
         132838 SEA FILE=CAPLUS ABB=ON PLU=ON ANTIBODIES/CT
L2
                                               IMMUNOGLOBULINS/CT
          66872 SEA FILE=CAPLUS ABB=ON PLU=ON
L3
          77415 SEA FILE=CAPLUS ABB=ON PLU=ON
                                               "ANTIBODIES AND IMMUNOGLOBULINS
L5
                "/CT
        263165 SEA FILE=CAPLUS ABB=ON
                                       PLU=ON L5 OR L2 OR L3
L6
          87507 SEA FILE=CAPLUS ABB=ON PLU=ON L6 (L) (PREP OR BPN OR SPN OR
L7
               DGN OR THU OR USES )/RL
          8253 SEA FILE=CAPLUS ABB=ON PLU=ON L7 (L) (RECOMBIN?/OBI OR-
L8
               CHIMER?/OBI OR HUMANI?/OBI)
                                               CDR#/BI
           4850 SEA FILE=CAPLUS ABB=ON PLU=ON
L9
            46 SEA FILE=CAPLUS ABB=ON PLU=ON L8 (L) L9
L11
           2649 SEA FILE=CAPLUS ABB=ON PLU=ON
                                               (CDR1 OR CDR2 OR CDR3)/BI
L12
            94 SEA FILE=CAPLUS ABB=ON PLU=ON
                                               L12 AND L8
L13
            130 SEA FILE=CAPLUS ABB=ON PLU=ON L11 OR L13
L14
          14623 SEA FILE=CAPLUS ABB=ON PLU=ON HEAVY CHAIN/OBI
L15
          25301 SEA FILE=CAPLUS ABB=ON PLU=ON LIGHT CHAIN/OBI
L16
         252321 SEA FILE=CAPLUS ABB=ON PLU=ON PROTEIN SEQUENCE#/OBI
L17
           1100 SEA FILE=CAPLUS ABB=ON PLU=ON
                                               (ANTIGEN BIND? SITE)/BI
L18
             9 SEA FILE=CAPLUS ABB=ON PLU=ON L18 AND L14
L19
          93965 SEA FILE=CAPLUS ABB=ON PLU=ON BIOMARKER#/OBI OR MARKER#/OBI
L20
          19544 SEA FILE=CAPLUS ABB=ON PLU=ON CANCER/OBI (L) DIAGNOS?/OBI
L22
            17 SEA FILE=CAPLUS ABB=ON PLU=ON L22 AND L14
L23
             4 SEA FILE=CAPLUS ABB=ON PLU=ON L23 AND L20
L24
                                       PLU=ON L19 OR L24
            13 SEA FILE=CAPLUS ABB=ON
L25
                                       PLU=ON L17 AND L14
             92 SEA FILE=CAPLUS ABB=ON
L26
             92 SEA FILE=CAPLUS ABB=ON
                                       PLU=ON L26 AND ((L16 OR L17))
L27
             7 SEA FILE=CAPLUS ABB=ON
                                       PLU=ON L18 AND L27
L28
             13 SEA FILE=CAPLUS ABB=ON
                                       PLU=ON L25 OR L28
L29
          87360 SEA FILE=CAPLUS ABB=ON
                                       PLU=ON VECTOR?/OBI
L30
             36 SEA FILE=CAPLUS ABB=ON
                                       PLU=ON L14 AND L30
L31
                                       PLU=ON L31 AND ((L15 OR L16) OR L22
             25 SEA FILE=CAPLUS ABB=ON
L32
                OR L20)
             22 SEA FILE=CAPLUS ABB=ON
                                       PLU=ON L32 NOT L29
L33
                                       PLU=ON DNA/OBI OR CDNA/OBI OR NUCLEIC
         656043 SEA FILE=CAPLUS ABB=ON
L34
               ACID/OBI
             19 SEA FILE=CAPLUS ABB=ON PLU=ON L33 AND L34
L35
            32 SEA FILE=CAPLUS ABB=ON PLU=ON L35 OR L29
L36
           287 SEA FILE=CAPLUS ABB=ON PLU=ON L8 AND L20 AND L22
L47
           260 SEA FILE=CAPLUS ABB=ON PLU=ON L47 AND L34
L48
           3726 SEA FILE=CAPLUS ABB=ON PLU=ON L15 AND L16
L49
             37 SEA FILE=CAPLUS ABB=ON PLU=ON L48 AND L49
L50
             37 SEA FILE=CAPLUS ABB=ON PLU=ON L50 AND L17
L51
             5 SEA FILE=CAPLUS ABB=ON PLU=ON L51 AND L9
L54
             35 SEA FILE=CAPLUS ABB=ON
                                       PLU=ON L54 OR L36
L55
                                       PLU=ON ANTIBOD?/TI,IT
L58
         354629 SEA FILE=BIOSIS ABB=ON
                                       PLU=ON
                                               IMMUNOGLOBULIN?/TI,IT
         148790 SEA FILE=BIOSIS ABB=ON
L59
                                               CDR1 OR CDR2 OR CDR3
           2488 SEA FILE=BIOSIS ABB=ON
                                       PLU=ON
L60
                                               L58 OR L59
         460412 SEA FILE=BIOSIS ABB=ON
                                       PLU=ON
L61
            996 SEA FILE=BIOSIS ABB=ON
                                       PLU=ON L60 AND L61
L62
```

```
728 SEA FILE-BIOSIS ABB-ON PLU-ON L62 AND (CHIMER? OR RECOMBIN?
L63
               OR HUMAN?)
        318259 SEA FILE=BIOSIS ABB=ON PLU=ON MARKER? OR BIOMARKER?
L64
            34 SEA FILE=BIOSIS ABB=ON PLU=ON L63 AND L64
L65
             1 SEA FILE=BIOSIS ABB=ON PLU=ON CANCER AND L65
L66
         22617 SEA FILE=BIOSIS ABB=ON PLU=ON LIGHT CHAIN
L67
L68
         25751 SEA FILE=BIOSIS ABB=ON PLU=ON HEAVY CHAIN
            18 SEA FILE=BIOSIS ABB=ON PLU=ON L65 AND ((L67 OR L68))
L69
         11770 SEA FILE=BIOSIS ABB=ON PLU=ON
                                              PROTEIN SEQUENCE
L70
                                              (DNA OR CDNA OR NUCLEIC ACID)
L71
       1201460 SEA FILE=BIOSIS ABB=ON PLU=ON
                                      PLU=ON L69 AND (L70 OR L71)
L73
             8 SEA FILE=BIOSIS ABB=ON
                                      PLU=ON
           848 SEA FILE=BIOSIS ABB=ON
                                              ANTIGEN BIND? SITE
L74
             1 SEA FILE=BIOSIS ABB=ON
                                      PLU=ON
                                              L65 AND L74
L75
L76
         47654 SEA FILE=BIOSIS ABB=ON
                                      PLU=ON HOST (4A) CELL OR ANIMAL (4A)
               HOST
L77
             1 SEA FILE=BIOSIS ABB=ON
                                      PLU=ON L65 AND L76
            10 SEA FILE=BIOSIS ABB=ON PLU=ON L66 OR L73 OR L75 OR L77
L78
            45 DUP REM L55 L78 (0 DUPLICATES REMOVED)
L93
                    ementer seach
=> d que 194
        132838 SEA FILE=CAPLUS ABB=ON PLU=ON ANTIBODIES/CT
L2
L3
         66872 SEA FILE=CAPLUS ABB=ON PLU=ON
                                              IMMUNOGLOBULINS/CT
         77415 SEA FILE=CAPLUS ABB=ON PLU=ON
                                              "ANTIBODIES AND IMMUNOGLOBULINS
L5
               "/CT
        263165 SEA FILE=CAPLUS ABB=ON PLU=ON L5 OR L2 OR L3
L6
         87507 SEA FILE=CAPLUS ABB=ON PLU=ON L6 (L) (PREP OR BPN OR SPN OR
L7
               DGN OR THU OR USES )/RL
          8253 SEA FILE=CAPLUS ABB=ON PLU=ON L7 (L) (RECOMBIN?/OBI OR
L8
               CHIMER?/OBI OR HUMANI?/OBI)
L9
          4850 SEA FILE=CAPLUS ABB=ON PLU=ON CDR#/BI
L10
           373 SEA FILE=CAPLUS ABB=ON PLU=ON
                                              L8 AND L9
L11
            46 SEA FILE=CAPLUS ABB=ON PLU=ON
                                              L8 (L) L9
L12
          2649 SEA FILE=CAPLUS ABB=ON PLU=ON
                                              (CDR1 OR CDR2 OR CDR3)/BI
L13
            94 SEA FILE=CAPLUS ABB=ON PLU=ON
                                              L12 AND L8
           130 SEA FILE=CAPLUS ABB=ON PLU=ON L11 OR L13
L14
         14623 SEA FILE=CAPLUS ABB=ON PLU=ON HEAVY CHAIN/OBI
L15
         25301 SEA FILE=CAPLUS ABB=ON PLU=ON LIGHT CHAIN/OBI
L16
        252321 SEA FILE=CAPLUS ABB=ON PLU=ON PROTEIN SEQUENCE#/OBI
L17
L18
          1100 SEA FILE=CAPLUS ABB=ON PLU=ON
                                              (ANTIGEN BIND? SITE)/BI
L19
             9 SEA FILE=CAPLUS ABB=ON PLU=ON L18 AND L14
L20
         93965 SEA FILE=CAPLUS ABB=ON PLU=ON BIOMARKER#/OBI OR MARKER#/OBI
L22
         19544 SEA FILE=CAPLUS ABB=ON PLU=ON
                                              CANCER/OBI (L) DIAGNOS?/OBI
L23
            17 SEA FILE=CAPLUS ABB=ON PLU=ON L22 AND L14
L24
            4 SEA FILE=CAPLUS ABB=ON PLU=ON L23 AND L20
L25
            13 SEA FILE=CAPLUS ABB=ON
                                      PLU=ON L19 OR L24
L26
            92 SEA FILE=CAPLUS ABB=ON PLU=ON L17 AND L14
            92 SEA FILE=CAPLUS ABB=ON PLU=ON L26 AND ((L16 OR L17))
L27
L28
            7 SEA FILE=CAPLUS ABB=ON PLU=ON L18 AND L27
            13 SEA FILE=CAPLUS ABB=ON PLU=ON L25 OR L28
L29
         87360 SEA FILE=CAPLUS ABB=ON PLU=ON VECTOR?/OBI
L30
            36 SEA FILE=CAPLUS ABB=ON PLU=ON L14 AND L30
L31
L32
            25 SEA FILE=CAPLUS ABB=ON PLU=ON L31 AND ((L15 OR L16) OR L22
               OR L20)
            22 SEA FILE=CAPLUS ABB=ON PLU=ON L32 NOT L29
L33
        656043 SEA FILE=CAPLUS ABB=ON PLU=ON DNA/OBI OR CDNA/OBI OR NUCLEIC
L34
               ACID/OBI
L35
            19 SEA FILE=CAPLUS ABB=ON PLU=ON L33 AND L34
            32 SEA FILE=CAPLUS ABB=ON PLU=ON L35 OR L29
L36
            77 SEA FILE=CAPLUS ABB=ON PLU=ON BOLHUIS R?/AU
L37
```

```
9 SEA FILE=CAPLUS ABB=ON PLU=ON WOEHL T?/AU
L38
           26 SEA FILE=CAPLUS ABB=ON PLU=ON BOETTGER V?/AU
L39
          110 SEA FILE=CAPLUS ABB=ON PLU=ON (L37 OR L38 OR L39)
L40
            1 SEA FILE=CAPLUS ABB=ON PLU=ON L40 AND L10
L41
            1 SEA FILE=CAPLUS ABB=ON PLU=ON L41 AND L9
L42
            1 SEA FILE=CAPLUS ABB=ON PLU=ON L41 OR L42
L43
           16 SEA FILE=CAPLUS ABB=ON PLU=ON L7 AND L40
L44
           2 SEA FILE=CAPLUS ABB=ON PLU=ON L44 AND (L20 OR L22)
L45
             2 SEA FILE=CAPLUS ABB=ON PLU=ON L43 OR L45
L46
          287 SEA FILE=CAPLUS ABB=ON PLU=ON L8 AND L20 AND L22
L47
           260 SEA FILE=CAPLUS ABB=ON PLU=ON L47 AND L34
L48
          3726 SEA FILE=CAPLUS ABB=ON PLU=ON L15 AND L16
            37 SEA FILE=CAPLUS ABB=ON PLU=ON L48 AND L49
L50
            37 SEA FILE=CAPLUS ABB=ON PLU=ON L50 AND L17
L51
             5 SEA FILE=CAPLUS ABB=ON PLU=ON L51 AND L9
L54
            35 SEA FILE=CAPLUS ABB=ON PLU=ON L54 OR L36
L55
L57
             1 SEA FILE=CAPLUS ABB=ON PLU=ON L46 NOT L55
        354629 SEA FILE=BIOSIS ABB=ON PLU=ON ANTIBOD?/TI,IT
L58
        148790 SEA FILE=BIOSIS ABB=ON PLU=ON IMMUNOGLOBULIN?/TI,IT
L59
          2488 SEA FILE=BIOSIS ABB=ON PLU=ON CDR1 OR CDR2 OR CDR3
L60
        460412 SEA FILE=BIOSIS ABB=ON PLU=ON L58 OR L59
L61
           996 SEA FILE=BIOSIS ABB=ON PLU=ON L60 AND L61
L62
           728 SEA FILE=BIOSIS ABB=ON PLU=ON L62 AND (CHIMER? OR RECOMBIN?
L63
               OR HUMAN?)
        318259 SEA FILE=BIOSIS ABB=ON PLU=ON MARKER? OR BIOMARKER?
L64
            34 SEA FILE=BIOSIS ABB=ON PLU=ON L63 AND L64
L65
             1 SEA FILE=BIOSIS ABB=ON PLU=ON CANCER AND L65
L66
         22617 SEA FILE=BIOSIS ABB=ON PLU=ON LIGHT CHAIN
L67
         25751 SEA FILE=BIOSIS ABB=ON PLU=ON HEAVY CHAIN
L68
            18 SEA FILE=BIOSIS ABB=ON PLU=ON L65 AND ((L67 OR L68))
L69
         11770 SEA FILE=BIOSIS ABB=ON PLU=ON PROTEIN SEQUENCE
L70
       1201460 SEA FILE=BIOSIS ABB=ON PLU=ON (DNA OR CDNA OR NUCLEIC ACID)
L71
             8 SEA FILE=BIOSIS ABB=ON PLU=ON L69 AND (L70 OR L71)
L73
           848 SEA FILE=BIOSIS ABB=ON PLU=ON ANTIGEN BIND? SITE
L74
             1 SEA FILE=BIOSIS ABB=ON PLU=ON L65 AND L74
L75
         47654 SEA FILE=BIOSIS ABB=ON PLU=ON HOST (4A) CELL OR ANIMAL (4A)
L76
               HOST
             1 SEA FILE=BIOSIS ABB=ON PLU=ON L65 AND L76
L77
L78
            10 SEA FILE=BIOSIS ABB=ON PLU=ON L66 OR L73 OR L75 OR L77
            37 SEA FILE=BIOSIS ABB=ON PLU=ON ("BOLHUIS REINDER"/AU OR
L79
               "BOLHUIS REINDER I H"/AU OR "BOLHUIS REINDER L"/AU OR "BOLHUIS
               REINDER L H"/AU OR "BOLHUIS REINER L H"/AU OR "BOLHUIS REINIER
               L H"/AU)
             9 SEA FILE=BIOSIS ABB=ON PLU=ON
                                               "WOEHL THORSTEN"/AU
L80
             7 SEA FILE=BIOSIS ABB=ON PLU=ON
                                               "BOETTGER VOLKER"/AU
L81
            53 SEA FILE=BIOSIS ABB=ON PLU=ON
                                              (L79 OR L80 OR L81)
L82
            21 SEA FILE=BIOSIS ABB=ON PLU=ON L82 AND L61
L83
            18 SEA FILE-BIOSIS ABB-ON PLU-ON L83 AND (CHIMER? OR HUMAN? OR
L85
               RECOMBIN? OR VECTOR?)
             9 SEA FILE=BIOSIS ABB=ON PLU=ON L85 AND CANCER
L87
             1 SEA FILE=BIOSIS ABB=ON PLU=ON L85 AND ((L67 OR L68))
L88
            10 SEA FILE=BIOSIS ABB=ON PLU=ON
                                              (L87 OR L88)
L90
L91
            10 SEA FILE=BIOSIS ABB=ON PLU=ON L90 NOT L78
L94
            11 DUP REM L57 L91 (0 DUPLICATES REMOVED)
```

=> d .ca 1-35 193 ; d ibib ab ct 193 36-45; d ibib 194 1-11

L93 ANSWER 1 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN ACCESSION NUMBER: 2006:32288 CAPLUS

144:127499 DOCUMENT NUMBER: Human anti-KIR receptor antibodies for potentiating NK TITLE: cell cytotoxicity and treating cancer or infection INVENTOR(S): Moretta, Alessandro; Della Chiesa, Mariella; Andre, Pascale; Gauthier, Laurent; Romagne, Francois; Wagtmann, Peter Andreas Nicolai Reumert; Svendsen, Ivan; Zahn, Stefan; Svensson, Anders; Thorolfsson, Matthias Novo Nordisk A/S, Den.; Innate Pharma; University of PATENT ASSIGNEE(S): Genoa SOURCE: PCT Int. Appl., 153 pp. CODEN: PIXXD2 DOCUMENT TYPE: Patent English LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: PATENT NO. KIND DATE APPLICATION NO. DATE ---------WO 2005-EP53122 WO 2006003179 A2 20060112 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM WO 2005003168 20050113 WO 2004-DK470 20040701 A2 WO 2005003168 **A3** 20050506 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MX, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG WO 2005003172 20050113 WO 2004-IB2464 A2 20040701 20050310 WO 2005003172 Α3 AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG PRIORITY APPLN. INFO.: WO 2004-DK470 A 20040701

WO 2004-IB2464

A 20040701

DK 2005-25 A 20050106 US 2003-483894P P 20030702 US 2004-545471P P 20040219

ED Entered STN: 13 Jan 2006

AB Compns. and methods for regulating an immune response in a subject are described. More particularly, described are human antibodies that regulate the activity of NK cells and allow a potentiation of NK cell cytotoxicity in mammalian subjects, and antibodies having antigen-binding properties similar to those of human monoclonal antibody 1-7F9 or 14F1. Described also are also fragments and derivs. of such antibodies, as well as pharmaceutical compns. comprising the same and their uses, particularly for use in therapy, to increase NK cell activity or cytotoxicity in subjects.

CC 15-3 (Immunochemistry)

Section cross-reference(s): 1, 3, 63

IT Protein motifs

(CDR1-3 of light and heavy chains; human

anti-KIR receptor antibodies for potentiating NK cell cytotoxicity and treating cancer or infection)

IT Antibodies and Immunoglobulins

RL: BPN (Biosynthetic preparation); BSU (Biological study,

unclassified); PRP (Properties); THU (Therapeutic use); BIOL

(Biological study); PREP (Preparation); USES (Uses)

(chimeric; human anti-KIR receptor antibodies for

potentiating NK cell cytotoxicity and treating cancer or infection)

IT Antibodies and Immunoglobulins

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(heavy chain; human anti-KIR receptor antibodies

for potentiating NK cell cytotoxicity and treating cancer or infection)

IT Affinity

Angiogenesis inhibitors

Animal cell line

Anti-infective agents

Antitumor agents

Cytolysis

Cytotoxicity

Dissociation constant

Drug delivery systems

Drugs

Epitopes

Genetic vectors

Human

Hybridoma

Immunomodulators

Infection

Kidney, neoplasm

Lung, neoplasm

Lymphocyte

Mammalia

Mammary gland, neoplasm

Melanoma

Molecular cloning

Multiple myeloma

Neoplasm

Ovary, neoplasm

Protein sequences

Radiotherapy

T cell (lymphocyte)

(human anti-KIR receptor antibodies for potentiating NK cell cytotoxicity and treating cancer or infection)

IT Nucleic acids

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); BIOL (Biological study); PREP (Preparation)

(human anti-KIR receptor antibodies for potentiating NK cell cytotoxicity and treating cancer or infection)

IT Antibodies and Immunoglobulins

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(humanized; human anti-KIR receptor antibodies for

potentiating NK cell cytotoxicity and treating cancer or infection)

IT Antibodies and Immunoglobulins

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(light chain; human anti-KIR receptor antibodies for potentiating NK cell cytotoxicity and treating cancer or infection)

L93 ANSWER 2 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2006:229643 CAPLUS

DOCUMENT NUMBER: 144:310451

TITLE: Anti-human C-C chemokine receptor 3 protein antibodies

and fragments for diagnosis and treatment of

inflammation, autoimmune disease and infection as well

as drug screening

INVENTOR(S): Gerard, Craig J.; Gerard, Norma P.; Mackay, Charles

R.; Ponath, Paul D.; Post, Theodore W.; Qin, Shixin Children's Medical Center Corp., USA; Millennium

PATENT ASSIGNEE(S): Children's Medical Center Corp., USA; Millennium Pharmaceuticals, Inc.; Brigham & Women's Hospital

U.S., 85 pp., Cont.-in-part of U.S. Ser. No. 375,199.

CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

SOURCE:

PATI	ENT 1	NO.			KIN	D :	DATE			APPL	ICAT	ION I	NO.		D.	ATE		
us '	7012	133			B1	_	2006	0314		US 1:	 997-:	9636!		- 1	 9971	 103		
US 6	US 6806061				B1 20041019									19950119				
WO S	WO 9622371				A2		1996	0725		WO 1:	996-1	US60	8	19960119				
WO S	9622	371			A3		1996	1017										
	W:	AL,	AM,	AT,	AU,	ΑZ,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CZ,	DE,	DK,	EE,	
		ES,	FI,	GB,	GE,	HU,	IS,	JP,	KE,	KG,	KΡ,	KR,	ΚZ,	LK,	LR,	LS,	LT,	
		LU,	LV,	MD,	MG,	MK,	MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	
		SG,	SI															
	RW:	ΚE,	LS,	MW,	SD,	SZ,	ŪG,	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IE.,	
		IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	ML,	MR,	NE
US 6	6537	764			B1		2003	0325		US 1:	996-	7205	65		1	9960	930	
US 2	2006	0029	26		A1		2006	0105		US 2	005-	2166	10		2	0050	831	
PRIORITY APPLN. INFO.:			. :					US 1995-375199						A2 1	9950	119		
										WO 1:	996-1	US601	В	1	W 1	9960	119	
										US 1:	996-	7205	65		A3 1	9960	930	
										US 1	997-	9636!	56	1	A1 1	9971	103	

ED Entered STN: 15 Mar 2006

AB The present invention relates to isolated and/or recombinant nucleic acids which encode a mammalian (e.g., human) receptor protein designated C-C Chemokine Receptor 3 (CKR-3) or Eos L2, and to proteins or polypeptides,

referred to herein as isolated, recombinant mammalian CKR-3 receptors. The invention further relates to recombinant nucleic acid constructs, comprising a nucleic acid which encodes a receptor protein of the present invention or a portion thereof; to host cells comprising such constructs, useful for the production of recombinant CKR-3 receptors or polypeptides; and to antibodies reactive with the receptors, which are useful in research and diagnostic applications. Also provided are methods of use of the nucleic acids, proteins, and host cells to identify ligands, inhibitors (e.g., antagonists) or promoters (agonists) of receptor function. Administration of a compound which inhibits or promotes receptor function to an individual in need of therapy provides a new approach to selective modulation of leukocyte function, which is useful in a variety of inflammatory and autoimmune diseases, or in the treatment of infections. As a major leukocyte chemokine receptor present in leukocytes such as eosinophils and lymphocytes, the receptor provides a key target for drug screening and design. INCL 530387100; 530388220; 435320100; 435325000 15-3 (Immunochemistry) Section cross-reference(s): 1, 3, 9, 63 Affinity Anti-infective agents Anti-inflammatory agents Autoimmune disease DNA sequences Genetic vectors Human Hybridoma Immunoassay Immunotherapy Infection Inflammation Leukocyte Molecular cloning Nucleic acid hybridization Plasmids Protein sequences Retroviral vectors cDNA sequences (anti-human C-C chemokine receptor 3 protein antibodies and fragments for diagnosis and treatment of inflammation, autoimmune disease and infection as well as drug screening) Antisense nucleic acids RL: ARU (Analytical role, unclassified); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses) (anti-human C-C chemokine receptor 3 protein antibodies and fragments for diagnosis and treatment of inflammation, autoimmune disease and infection as well as drug screening) Antibodies and Immunoglobulins RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses) (chimeric; anti-human C-C chemokine receptor 3 protein antibodies and fragments for diagnosis and treatment of inflammation, autoimmune disease and infection as well as drug screening) Antibodies and Immunoglobulins RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(heavy chain, CDR1-3; anti-human C-C

IT

IT

IT

chemokine receptor 3 protein antibodies and fragments for diagnosis and treatment of inflammation, autoimmune disease and infection as well as drug screening)

IT Antibodies and Immunoglobulins

RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST

(Analytical study); BIOL (Biological study); USES (Uses)

(humanized; anti-human C-C chemokine receptor 3 protein antibodies and fragments for diagnosis and treatment of inflammation,

autoimmune disease and infection as well as drug screening)

IT Antibodies and Immunoglobulins

RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(light chain, CDR1-3; anti-human C-C

chemokine receptor 3 protein antibodies and fragments for diagnosis and treatment of inflammation, autoimmune disease and infection as well as drug screening)

REFERENCE COUNT:

57 THERE ARE 57 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L93 ANSWER 3 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:983976 CAPLUS

DOCUMENT NUMBER:

143:284715

TITLE:

Rationally designed or domain-exchanged antibodies comprising biologically active peptide for diagnostic

or therapeutic purpose

INVENTOR(S):

Bowdish, Katherine S.; Frederickson, Shana; Renshaw,

Mark; Maruyama, Toshiaki; Orencia, Cecilia

PATENT ASSIGNEE(S):

Alexion Pharmaceuticals, Inc., USA PCT Int. Appl., 61 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. K			KIND DATE			APPLICATION NO.						DATE						
	WO 2005002004					-												
WO 2005082004 A2 2				2005	0909	,	WO 2005-US5879					20050222						
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,	
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KΡ,	KR,	KZ,	LC,	
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,	
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	
		SY,	ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	ŪG,	US,	UZ,	VC,	VN,	ΥU,	ZA,	ZM,	zw
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	
		ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	
		EE,	ES,	FI,	FR,	GB,	GR,	ΗU,	ΙE,	IS,	IT,	LT,	LU,	MC,	NL,	PL,	PT,	
		RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	
		MR,	NE,	SN,	TD,	TG												
RITY	APP	LN.	INFO	. :					1	US 2	004-	5471	33P]	P 20	00402	224	

PRIORITY APPLN. INFO.: ED Entered STN: 09 Sep 2005

B Domain-exchanged antibodies having CDR regions replaced or fused with biol. active peptides are described. Flanking sequences may optionally be attached at one or both the carboxy-terminal and amino-terminal ends of the peptide in covalent association with adjacent framework regions. Compns. containing such modified domain-exchanged antibodies are useful in therapeutic and diagnostic modalities.

IC ICM A61K

```
CC
    15-3 (Immunochemistry)
    Section cross-reference(s): 1, 3, 9, 63
IT
    Antibodies and Immunoglobulins
    RL: BPN (Biosynthetic preparation); BSU (Biological study,
    unclassified); DGN (Diagnostic use); THU (Therapeutic
    use); BIOL (Biological study); PREP (Preparation);
    USES (Uses)
        (chimeric; rationally designed or domain-exchanged antibodies
        comprising biol. active peptide replacing CDR for diagnosis
        and therapy)
TT
    Antibodies and Immunoglobulins
    RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
    DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
        (heavy chain; rationally designed or
        domain-exchanged antibodies comprising biol. active peptide replacing
        CDR for diagnosis and therapy)
    Antibodies and Immunoglobulins
IT
    RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
    DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
        (light chain; rationally designed or
        domain-exchanged antibodies comprising biol. active peptide replacing
        CDR for diagnosis and therapy)
IT
    Adoptive immunotherapy
    Cell differentiation
    Cell proliferation
    Diabetes mellitus
    Drug design
    Genetic vectors
    Hematopoietic precursor cell
    Human immunodeficiency virus 1
     Immunoassay
     Immunotherapy
    Megakaryocyte
    Peptidomimetics
     Test kits
       cDNA library
        (rationally designed or domain-exchanged antibodies comprising biol.
        active peptide replacing CDR for diagnosis and therapy)
    Antibodies and Immunoglobulins
IT
     Fusion proteins (chimeric proteins)
      Nucleic acids
    RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
    DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
        (rationally designed or domain-exchanged antibodies comprising biol.
        active peptide replacing CDR for diagnosis and therapy)
     864194-16-1DP, Adiponectin (synthetic peptide Acrp30), antibody
    heavy chain conjugates
                              864202-13-1P
                                             864202-14-2P
     864202-16-4P
                    864202-18-6P
                                   864202-21-1P
                                                  864202-22-2P
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (amino acid sequence; rationally designed or domain-exchanged
        antibodies comprising biol. active peptide replacing CDR for diagnosis
        and therapy)
```

L93 ANSWER 4 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN

2005:564636 CAPLUS ACCESSION NUMBER: DOCUMENT NUMBER: 143:95823 Anti-IP-10 antibodies and immunoconjugates for TITLE: treating inflammation, autoimmune disease, neurodegenerative disease, bacterial infection and viral infection Deshpande, Shrikant; Huang, Haichun; Srinivasan, INVENTOR (S): Mohan: Cardarelli, Josephine M.; Wang, Changyu; Passmore, David; Rangan, Vangipuram S.; Lane, Thomas E.; Keirstead, Hans S.; Liu, Michael T. PATENT ASSIGNEE(S): Medarex, Inc., USA SOURCE: PCT Int. Appl., 179 pp. CODEN: PIXXD2 DOCUMENT TYPE: Patent English LANGUAGE: FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION: PATENT NO. KIND DATE APPLICATION NO. DATE -----______ WO 2005058815 A2 20050630 WO 2004-US41506 20041210 A3 WO 2005058815 20060223 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG US 2005191293 A1 20050901 US 2004-9731 20041210 P 20031210 US 2003-529180P PRIORITY APPLN. INFO.: Entered STN: 30 Jun 2005 ED The present invention provides isolated monoclonal antibodies, particularly human antibodies, that bind to IP-10 with high affinity, inhibit the binding of IP-10 to its receptor, inhibit IP-10-induced calcium flux and inhibit IP-10-induced cell migration. Nucleic acid mols. encoding the antibodies of the invention, expression vectors, host cells and methods for expressing the antibodies of the invention are also provided. Immunoconjugates, bispecific mols. and pharmaceutical compns. comprising the antibodies of the invention are also provided. The invention also provides methods for inhibiting IP-10 activity using the antibodies of the invention, including methods for treating various inflammatory and autoimmune diseases. ICM C07D IC 15-3 (Immunochemistry) CC Section cross-reference(s): 1, 3, 63 IT Protein motifs (CDR1-3 of light and heavy chain; anti-IP-10 antibodies and immunoconjugates for treating inflammation, autoimmune disease, neurodegenerative disease, bacterial infection and viral infection) IT Alzheimer's disease Angiogenesis Asthma Atherosclerosis

Autoimmune disease

```
Chemotaxis
  DNA sequences
Dermatitis
Drug delivery systems
Genetic vectors
Graves' disease
Hepatitis C virus
Human
Human herpesvirus 1
Human immunodeficiency virus
Hybridoma
Immunotherapy
Inflammation
Macaca mulatta
Molecular cloning
Multiple sclerosis
Parkinson's disease
Protein sequences
Psoriasis
Rheumatoid arthritis
SARS coronavirus
Sjogren syndrome
Transplant rejection
   (anti-IP-10 antibodies and immunoconjugates for treating inflammation,
   autoimmune disease, neurodegenerative disease, bacterial infection and
   viral infection)
Nucleic acids
Radionuclides, biological studies
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
   (anti-IP-10 antibodies and immunoconjugates for treating inflammation,
   autoimmune disease, neurodegenerative disease, bacterial infection and
   viral infection)
Antibodies and Immunoglobulins
RL: BPN (Biosynthetic preparation); BSU (Biological study,
unclassified); PRP (Properties); THU (Therapeutic use); BIOL
(Biological study); PREP (Preparation); USES (Uses)
   (chimeric; anti-IP-10 antibodies and immunoconjugates for
   treating inflammation, autoimmune disease, neurodegenerative disease,
   bacterial infection and viral infection)
Antibodies and Immunoglobulins
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP
(Preparation); USES (Uses)
   (heavy chain; anti-IP-10 antibodies and
   immunoconjugates for treating inflammation, autoimmune disease,
   neurodegenerative disease, bacterial infection and viral infection)
Antibodies and Immunoglobulins
RL: BPN (Biosynthetic preparation); BSU (Biological study,
unclassified); PRP (Properties); THU (Therapeutic use); BIOL
(Biological study); PREP (Preparation); USES (Uses)
   (humanized; anti-IP-10 antibodies and immunoconjugates for
   treating inflammation, autoimmune disease, neurodegenerative disease,
   bacterial infection and viral infection)
Antibodies and Immunoglobulins
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP
(Preparation); USES (Uses)
   (light chain; anti-IP-10 antibodies and
   immunoconjugates for treating inflammation, autoimmune disease,
```

ΙT

ΙT

TΤ

IT

TΤ

neurodegenerative disease, bacterial infection and viral infection)

L93 ANSWER 5 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2005:260102 CAPLUS

DOCOME

142:334929

TITLE:

Chimeric or humanized monoclonal anti-CD45 isoform antibodies for treating autoimmune disease, transplant

rejection, inflammation and allergy

INVENTOR(S):

Kolbinger, Frank; Carballido Herrera, Jose M.; Aszodi, Andras; Saldanha, Jose W.; Hall, Bruce M.; Gregori, Silvia; Roncarolo, Maria Grazia; Loux, Veronique;

Aversa, Gregorio; Jeschke, Margit

PATENT ASSIGNEE(S):

Novartis AG, Switz.; Novartis Pharma GmbH

SOURCE:

PCT Int. Appl., 134 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	ENT :	NO.			KIN	D :	DATE		2	APPL	ICAT:	ION I	NO.		D	ATE		
						-									-			
WO	2005	0262	10		A2		2005	0324	1	WO 2	004-	EP10	471		2	0040	917	
WO	WO 2005026210				A3		20050714											
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,	
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	ΚP,	KR,	ΚZ,	LC,	
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,	
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	
		TJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW	
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	
		ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	
		EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,	
		SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	
		SN,	TD,	TG														
US	2005	0695	38		A1		2005	0331	1	US 2	003-	6663	32		2	0030	918	
PRIORITY	APP	LN.	INFO	. :					1	US 2	003-	6663	32	7	A 2	0030	918	
									(GB 2	004-	1430	9	1	A 2	0040	625	

ED Entered STN: 25 Mar 2005

AB A mol. comprising at least one antigen binding site, comprising in sequence the hypervariable regions CDR1, CDR2 and CDR3, said CDR1

having the amino acid sequence Asn-Tyr-Ile-IIe-His (NYIIH), said CDR2 having the amino acid sequence Tyr-Phe-Asn-Pro-Tyr-Asn-His-Gly-Thr-Lys-Tyr-Asn-Glu-Lys-Phe -Lys-Gly (YFNPYNHGTKYNEKFKG) and said CDR3 having the amino acid sequence Ser-Gly-Pro-Tyr-Ala-Trp-Phe-Asp-Thr (SGPYAWFDT); e.g. further comprising in sequence the hypervariable regions CDR1', CDR2' and CDR3', CDR1

' having the amino acid sequence Arg-Ala-Ser-Gln-Asn-Ile-GIy-Thr-Ser-Ile-Gln (RASQNIGTSIQ), CDR2' having the amino acid sequence Ser-Ser-Glu-Ser-Ile-Ser (SSSESIS) and CDR3' having the amino acid sequence Gln-GIn-Ser-Asn-Thr-Trp-Pro-Phe-Thr (QQSNTWPFT), e.g. a chimeric or humanized antibody, useful as a pharmaceutical. The antibodies and derivs. are specific antigen CD45 e.g. CD45RO and CD45RB. The CD45 isoform-specific chimeric or humanized monoclonal antibodies and derivs. are useful for treating autoimmune diseases, transplant rejection, psoriasis, dermatitis, inflammatory bowel disease, allergy and graft vs. host disease.

IC ICM C07K016-28

ICS C12N015-13; C12N015-62; C12N015-79; C12N005-10; A61K039-395;

```
A61P037-00
CC
     15-3 (Immunochemistry)
     Section cross-reference(s): 3, 63
     human CD45 CD45RO CD45RB humanized chimeric antibody autoimmune disease;
ST
     inflammation allergy psoriasis monoclonal antibody humanized heavy
     light chain
IT
     Antibodies and Immunoglobulins
     RL: BPN (Biosynthetic preparation); BSU (Biological study,
     unclassified); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (IqG; chimeric or humanized monoclonal anti-CD45
        isoform antibodies for treating autoimmune disease, transplant
        rejection, inflammation and allergy)
     Allergy
ΙT
     Autoimmune disease
     CD4-positive T cell
     DNA sequences
     Dermatitis
     Dissociation constant
     Drug delivery systems
     Drugs
     Epitopes
     Genetic vectors
     Human
     Immunosuppression
     Inflammation
     Molecular cloning
       Protein sequences
     Psoriasis
     Transplant rejection
        (chimeric or humanized monoclonal anti-CD45 isoform antibodies for
        treating autoimmune disease, transplant rejection, inflammation and
        allergy)
IT
     Antibodies and Immunoglobulins
     Polynucleotides
     RL: BPN (Biosynthetic preparation); BSU (Biological study,
     unclassified); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (chimeric or humanized monoclonal anti-CD45 isoform
        antibodies for treating autoimmune disease, transplant rejection,
        inflammation and allergy)
     Antibodies and Immunoglobulins
IT
     RL: BPN (Biosynthetic preparation); BSU (Biological study,
     unclassified); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (chimeric; chimeric or humanized
        monoclonal anti-CD45 isoform antibodies for treating autoimmune
        disease, transplant rejection, inflammation and allergy)
     Antibodies and Immunoglobulins
ΙT
     RL: BPN (Biosynthetic preparation); BSU (Biological study,
     unclassified); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (fragments; chimeric or humanized monoclonal
        anti-CD45 isoform antibodies for treating autoimmune disease,
        transplant rejection, inflammation and allergy)
     Antibodies and Immunoglobulins
TT
     RL: BPN (Biosynthetic preparation); BSU (Biological study,
     unclassified); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
```

(heavy chain; chimeric or humanized monoclonal

anti-CD45 isoform antibodies for treating autoimmune disease, transplant rejection, inflammation and allergy)

Antibodies and Immunoglobulins IT

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(humanized; chimeric or humanized

monoclonal anti-CD45 isoform antibodies for treating autoimmune disease, transplant rejection, inflammation and allergy)

Antibodies and Immunoglobulins IT

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(light chain; chimeric or

humanized monoclonal anti-CD45 isoform antibodies for treating autoimmune disease, transplant rejection, inflammation and allergy)

Antibodies and Immunoglobulins IT

> RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (monoclonal; chimeric or humanized monoclonal

anti-CD45 isoform antibodies for treating autoimmune disease, transplant rejection, inflammation and allergy)

L93 ANSWER 6 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN

2005:216843 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 142:296682

Minimally immunogenic variants of humanized monoclonal TITLE:

anti-TAG-72 antibody CC49 for cancer

diagnosis and therapy

Kashmiri, Syed V. S.; Schlom, Jeffrey; Padlan, Eduardo INVENTOR(S):

Α.

PATENT ASSIGNEE(S): The Government of the United States of America, as

Represented by the Secretary of the Department of

Health and Human Services, USA

SOURCE: PCT Int. Appl., 86 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent English LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO.					KIN	D	DATE		;	APPL		DATE						
							_												
	WO	0 2005021594				A2 2005031			0310	WO 2004-US28004							20040827		
	WO	2005	0215	94		A 3		20050616											
		W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,	
			CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	
			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	ΚP,	KR,	KZ,	LC,	
			LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,	
			NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	
			ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UΖ,	VC,	VN,	YU,	ZA,	ZM,	zw	
		RW:	BW,	GH,	GM,	ΚE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	
			ΑZ,	BY,	KG,	KZ,	MD,	RU,	TJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	
			EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,	
			SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	
			SN,	TD,	TG														
PRIO	RITY	APP	LN.	INFO	. :					1	US 2	003-	4989	03P	1	P 2	0030	829	
ED	Ent	bara	STAI	. 1	1 Ma	r 20	05												

ED Entered STN: 11 Mar 2005

Humanized CC49 anti-TAG-72 monoclonal antibodies are disclosed herein.

```
The antibodies include a light chain Complementarity Determining Region L-
    CDR1, a L-CDR2, and a L-CDR3; and a heavy
     chain Complementarity Determining Region H-CDR1, a H-CDR2,
    and a H-CDR3 from humanized antibody HuCC49V10. The L-
     CDR1, L-CDR2, L-CDR3 are within a HuCC49V10
     light chain framework region that includes the corresponding amino acid
     from LEN at position 5, 19, 21, and 106 in the light chain.
     CDR1, H-CDR2, and H-CDR3 are within a heavy
     chain HuCC49V10 framework comprising a human 21/28' CL residue at
     positions 20, 38, 48, 66, 67, 69, and 80 in the heavy chain. These
     humanized CC49 antibodies retain binding affinity for TAG-72 and have
     reduced immunogenicity, as compared to a parental HuCC49V10 antibody.
     Methods are disclosed herein for using these antibodies in the treatment
     or diagnosis of a tumor, such as a carcinoma, expressing TAG-72.
IC
     ICM C07K016-46
     ICS C07K016-30; A61K039-395; A61P035-00; G01N033-574; C12N015-10
     15-3 (Immunochemistry)
CC
     Section cross-reference(s): 3, 9, 63
     humanized monoclonal antibody CC49 antigen TAG72 cancer
ST
     diagnosis therapy; carcinoma diagnosis therapy humanized
     Iq heavy light chain TAG72
     Nucleic acids
IT
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (ATCC PTA-5415; minimally immunogenic variants of humanized monoclonal
        anti-TAG-72 antibody CC49 for cancer diagnosis and
        therapy)
IT
     Tumor antigens
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (TAG-72 (tumor-associated glycoprotein 72); minimally immunogenic variants
        of humanized monoclonal anti-TAG-72 antibody CC49 for cancer
        diagnosis and therapy)
IT
     Samples
        (biopsy, autopsy and pathol. specimen; minimally immunogenic variants
        of humanized monoclonal anti-TAG-72 antibody CC49 for cancer
        diagnosis and therapy)
IT
     Diagnosis
        (cancer; minimally immunogenic variants of humanized
        monoclonal anti-TAG-72 antibody CC49 for cancer
        diagnosis and therapy)
     Drug delivery systems
IT
        (carriers; minimally immunogenic variants of humanized monoclonal
        anti-TAG-72 antibody CC49 for cancer diagnosis and
        therapy)
IT
     Biology
        (cell, host; minimally immunogenic variants of humanized monoclonal
        anti-TAG-72 antibody CC49 for cancer diagnosis and
        therapy)
IT
     Antibodies and Immunoglobulins
     RL: BPN (Biosynthetic preparation); BSU (Biological study,
     unclassified); DGN (Diagnostic use); PRP (Properties); THU
     (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
        (chimeric; minimally immunogenic variants of
        humanized monoclonal anti-TAG-72 antibody CC49 for
        cancer diagnosis and therapy)
     Antibodies and Immunoglobulins
IT
     RL: BPN (Biosynthetic preparation); BSU (Biological study,
     unclassified); DGN (Diagnostic use); THU (Therapeutic
```

```
use); BIOL (Biological study); PREP (Preparation);
    USES (Uses)
        (conjugates; minimally immunogenic variants of humanized
        monoclonal anti-TAG-72 antibody CC49 for cancer
        diagnosis and therapy)
TT
    Medical goods
        (containers; minimally immunogenic variants of humanized monoclonal
        anti-TAG-72 antibody CC49 for cancer diagnosis and
TT
    Antibodies and Immunoglobulins
    RL: BPN (Biosynthetic preparation); BSU (Biological study,
    unclassified); DGN (Diagnostic use); PRP (Properties); THU
     (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
        (fragments; minimally immunogenic variants of humanized
        monoclonal anti-TAG-72 antibody CC49 for cancer
        diagnosis and therapy)
тт
    Antibodies and Immunoglobulins
    RL: BPN (Biosynthetic preparation); BSU (Biological study,
    unclassified); DGN (Diagnostic use); PRP (Properties); THU
     (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
        (heavy chain; minimally immunogenic variants of
       humanized monoclonal anti-TAG-72 antibody CC49 for
        cancer diagnosis and therapy)
    Antibodies and Immunoglobulins
ΤТ
    RL: BPN (Biosynthetic preparation); BSU (Biological study,
    unclassified); DGN (Diagnostic use); PRP (Properties); THU
     (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
        (humanized; minimally immunogenic variants of
        humanized monoclonal anti-TAG-72 antibody CC49 for
        cancer diagnosis and therapy)
IT
    Drug delivery systems
        (immunoconjugates; minimally immunogenic variants of humanized
        monoclonal anti-TAG-72 antibody CC49 for cancer
        diagnosis and therapy)
IΤ
    Diagnosis
        (immunodiagnosis; minimally immunogenic variants of humanized
        monoclonal anti-TAG-72 antibody CC49 for cancer
        diagnosis and therapy)
IT
    Drug delivery systems
        (immunotoxins; minimally immunogenic variants of humanized monoclonal
        anti-TAG-72 antibody CC49 for cancer diagnosis and
        therapy)
IT
    Fluorescent substances
        (label; minimally immunogenic variants of humanized monoclonal
        anti-TAG-72 antibody CC49 for cancer diagnosis and
TT
    Radionuclides, biological studies
    RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (label; minimally immunogenic variants of humanized monoclonal
        anti-TAG-72 antibody CC49 for cancer diagnosis and
        therapy)
IT
    Antibodies and Immunoglobulins
    RL: BPN (Biosynthetic preparation); BSU (Biological study,
    unclassified); DGN (Diagnostic use); PRP (Properties); THU
     (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
```

```
(light chain; minimally immunogenic variants of
        humanized monoclonal anti-TAG-72 antibody CC49 for
        cancer diagnosis and therapy)
IT
     Containers
        (medical; minimally immunogenic variants of humanized monoclonal
        anti-TAG-72 antibody CC49 for cancer diagnosis and
        therapy)
ΙT
     Affinity
     Antitumor agents
     Body fluid
     Carcinoma
       DNA sequences
     Drug delivery systems
     Eukaryota
     Genetic vectors
     Human
     Immunotherapy
     Labels
     Mammalia
     Molecular cloning
     Protein sequences
     Test kits
        (minimally immunogenic variants of humanized monoclonal anti-TAG-72
        antibody CC49 for cancer diagnosis and therapy)
     Antibodies and Immunoglobulins
     RL: BPN (Biosynthetic preparation); BSU (Biological study,
     unclassified); DGN (Diagnostic use); PRP (Properties); THU
     (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
        (minimally immunogenic variants of humanized monoclonal
        anti-TAG-72 antibody CC49 for cancer diagnosis and
        therapy)
TT
     Toxins
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (minimally immunogenic variants of humanized monoclonal anti-TAG-72
        antibody CC49 for cancer diagnosis and therapy)
     Antibodies and Immunoglobulins
IT
     RL: BPN (Biosynthetic preparation); BSU (Biological study,
     unclassified); DGN (Diagnostic use); THU (Therapeutic
     use); BIOL (Biological study); PREP (Preparation);
     USES (Uses)
        (monoclonal, conjugates; minimally immunogenic variants of
        humanized monoclonal anti-TAG-72 antibody CC49 for
        cancer diagnosis and therapy)
     Antibodies and Immunoglobulins
IT
     RL: BPN (Biosynthetic preparation); BSU (Biological study,
     unclassified); DGN (Diagnostic use); PRP (Properties); THU
     (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
        (monoclonal; minimally immunogenic variants of humanized
        monoclonal anti-TAG-72 antibody CC49 for cancer
        diagnosis and therapy)
IT
     Mutagenesis
        (site-directed, substitution; minimally immunogenic variants of
        humanized monoclonal anti-TAG-72 antibody CC49 for cancer
        diagnosis and therapy)
                                 847664-76-0
                                                847664-77-1
                                                              847664-78-2
IT
     145882-24-2
                   164176-96-9
     847664-79-3
                   847664-80-6
     RL: PRP (Properties)
```

(Unclaimed; minimally immunogenic variants of humanized monoclonal anti-TAG-72 antibody CC49 for cancer diagnosis and therapy) .847717-55-9P IT 847710-02-5P RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (amino acid sequence; minimally immunogenic variants of humanized monoclonal anti-TAG-72 antibody CC49 for cancer diagnosis and therapy) 145060-99-7P 145061-00-3P 164176-98-1P IT 141977-02-8P 243655-56-3P 268230-84-8P 268230-83-7P 268230-85-9P 243655-58-5P 268230-86-0P 268230-91-7P 373379-16-9P 268230-88-2P 268230-89-3P 373379-25-0P 847664-69-1P 847664-70-4P 847664-67-9P 847664-68**-**0P 847664-71-5P 847664-74-8P 847664-87-3P 847664-73-7P 847664-72-6P 847664-89-5P 847664-91-9P 847664-93-1P RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (minimally immunogenic variants of humanized monoclonal anti-TAG-72 antibody CC49 for cancer diagnosis and therapy) IT 173480-62-1 268230-87-1 268230-92-8 288319-28-8 847664-75-9 847664-99-7 847664-97-5 847664-98-6 847665-00-3 847665-01-4 847719-61-3 847719-62-4 847665-02-5 847719-63-5 847719-64-6 847719-66-8 847719-67-9 847719-65-7 847719-68-0 847719-69-1 847719-71-5 847719-72-6 847719-73-7 847719-70-4 847719-74-8 847719-76-0 847719-78-2 847719-75-9 847719-77-1 847719-79-3 847719-80-6 847719-81-7 RL: PRP (Properties) (unclaimed sequence; minimally immunogenic variants of humanized monoclonal anti-TAG-72 antibody CC49 for cancer diagnosis and therapy) L93 ANSWER 7 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN ACCESSION NUMBER: 2005:99630 CAPLUS DOCUMENT NUMBER: 142:193052 TITLE: Sequences of human SSX-2 peptides presented by HLA class II molecules and uses in diagnosis and therapy for conditions relate to expression of SSX-2 gene INVENTOR(S): Valmori, Danila; Ayyoub, Maha PATENT ASSIGNEE(S): Ludwig Institute for Cancer Research, USA SOURCE: PCT Int. Appl., 100 pp. CODEN: PIXXD2 DOCUMENT TYPE: Patent English LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: PATENT NO. KIND DATE APPLICATION NO. _____ --------------WO 2004-US23544 WO 2005010190 A1 20050203 20040721 TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,

```
SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
             SN, TD, TG
     EP 1644501
                                20060412
                                            EP 2004-778867
                                                                   20040721
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK
PRIORITY APPLN. INFO.:
                                            US 2003-489257P
                                                                P
                                                                   20030722
                                                                W 20040721
                                            WO 2004-US23544
ED
     Entered STN: 04 Feb 2005
     The invention describes HLA class II binding peptides encoded by the SSX-2
AB
     tumor associated gene, as well as nucleic acids encoding such peptides and
     antibodies relating thereto. The peptides stimulate the activity and
     proliferation of CD4+ T lymphocytes. Methods and products also are
     provided for diagnosing and treating conditions characterized by
     expression of the SSX-2 gene.
IC
     ICM C12N015-12
     ICS
         C07K014-47; A61K038-17; A61K031-70; A61K039-395; A61K035-14;
          G01N033-574
CC
     6-3 (General Biochemistry)
     Section cross-reference(s): 1, 3, 13
     Antibodies and Immunoglobulins
IT
     RL: BPN (Biosynthetic preparation); BSU (Biological study,
     unclassified); BIOL (Biological study); PREP (Preparation)
        (chimeric; sequences of human SSX-2 peptides presented by HLA
        class II mols. and uses in diagnosis and therapy for conditions relate
        to expression of SSX-2 gene)
IT
    Diagnosis
        (for cancer; sequences of human SSX-2 peptides presented by
       HLA class II mols. and uses in diagnosis and therapy for
        conditions relate to expression of SSX-2 gene)
     Antibodies and Immunoglobulins
TΤ
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     BIOL (Biological study); PREP (Preparation)
        (fragments, Fab, F(ab)2, Fv, CDR3 region; sequences of human
        SSX-2 peptides presented by HLA class II mols. and uses in diagnosis
        and therapy for conditions relate to expression of SSX-2 gene)
     Antibodies and Immunoglobulins
TT
     RL: BPN (Biosynthetic preparation); BSU (Biological study,
     unclassified); BIOL (Biological study); PREP (Preparation)
        (humanized; sequences of human SSX-2 peptides presented by
        HLA class II mols. and uses in diagnosis and therapy for conditions
       relate to expression of SSX-2 gene)
TΤ
     Antigen-presenting cell
     Antitumor agents
     CD4-positive T cell
     CD8-positive T cell
     Genetic vectors
    Human
     Peptide library
     Protein sequences
     T cell (lymphocyte)
       cDNA sequences
        (sequences of human SSX-2 peptides presented by HLA class II mols. and
        uses in diagnosis and therapy for conditions relate to expression of
        SSX-2 gene)
                               THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS
REFERENCE COUNT:
                         6
                               RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
L93 ANSWER 8 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN
                         2005:14436 CAPLUS
ACCESSION NUMBER:
                         142:109115
DOCUMENT NUMBER:
```

Human C-type lectin and anti-human C-type lectin, TITLE:

sequences, recombinant production and therapeutic and

diagnostic uses thereof

Van Den Oudenrijn, Sonja; Van Meijer, Marja; Bakker, Adrianus Quirinus; Bakker, Alexander Berthold Henrik INVENTOR(S):

Crucell Holland B.V., Neth. PATENT ASSIGNEE(S): SOURCE:

PCT Int. Appl., 191 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATEN	PATENT NO.			KIND DATE			APPLICATION NO.					DATE					
	WO 2005000894 WO 2005000894			A2	2 20050106		WO 2004-EP51243					20040625					
W	: AE, CN, GE, LK, NO, TJ, W: BW, AZ, EE,	AG, CO, GH, LR, NZ, TM, GH, BY, ES,	AL, CR, GM, LS, OM, TN, GM, KG,	AM, CU, HR, LT, PG, TR, KE, KZ,	AT, CZ, HU, LU, PH, TT, LS, MD, GB,	AU, DE, ID, LV, PL, TZ, MW, RU, GR,	AZ, DK, IL, MA, PT, UA, MZ, TJ, HU,	DM, IN, MD, RO, UG, NA, TM, IE,	DZ, IS, MG, RU, US, SD, AT, IT,	EC, JP, MK, SC, UZ, SL, BE, LU,	EE, KE, MN, SD, VC, SZ, BG, MC,	EG, KG, MW, SE, VN, TZ, CH,	ES, KP, MX, SG, YU, UG, CY, PL,	FI, KR, MZ, SK, ZA, ZM, CZ, PT,	GB, KZ, NA, SL, ZM, ZW, DE, RO,	GD, LC, NI, SY, ZW AM, DK, SE,	
	SN,	TD,	TG			CF,											
AU 20	042518	90		A1		2005	0106	1	AU 20	004-	2518	90		20	0040	525	
	26284													20			
	36265																
R	: AT,					ES, RO,											HR
PRIORITY A	•	•	•	•	·	•	·	1	WO 20 WO 20 WO 20	003-1 004-1	EP35	0264 100		A 20	0030	525 209	

Entered STN: 07 Jan 2005 ED

The invention provides a novel human C-type lectin that is exclusively AB expressed in myeloid cells and possesses protein motifs YX1X2M and ITIM (immunotyrosine-based inhibition motif). The invention also provides antibodies capable of binding to said C-type lectin, including single chain Fv fragments (SC02-357, SC02-378 and SC02-161) and several IgG1. The invention further provides: (a) a cDNA mol. encoding said human C-type lectin, and nucleic acid mols. encoding said anti-human C-type lectin antibodies; and (b) immunoconjugate mols. composed of anti-human C-type lectin antibodies and a tag, such as a toxin, enzyme, liposome or radioactive substance. Still further, the invention provides: (a) vectors comprising nucleic acid sequences encoding said human C-type lectin or said anti-human C-type lectin antibodies; (b) use of said vectors in transforming host cells for recombinant production of human C-type lectin and/or said antibodies; (c) use of phage display library to identify said anti-human C-type lectin antibodies; and (d) use of said lectins, antibodies, and immunoconjugates, and transformed host cells in the diagnosis, prevention and/or treatment of neoplastic disorders, such as acute myeloid leukemia and/or other related leukemias. Finally, the invention provides the cDNA and amino acid sequences of human C-type lectin, and amino acid sequences of the CDR3 region ScFv fragments (SC02-357, SC02-378 and SC02-161) and IgG1 antibodies 357, 378 and 161. The invention discussed in the examples, that the human C-type lectin maps to chromosome 12, and that mRNA expression of the gene was

detected only in peripheral blood leukocytes. The human C-type lectin protein was detected only in the spleen. IC ICM C07K014-705 ICS C07K016-18 CC 6-3 (General Biochemistry) Section cross-reference(s): 14, 15, 63 human C type lectin cDNA sequence; protein sequence C type human stmotif; lectin C type human antibody IqG1 single chain sequence; diagnosis therapy leukemia C type lectin; therapy diagnosis leukemia C type lectin antibody; immunoconjugate anti human C type lectin antibody diagnosis therapy; acute myeloid leukemia lectin C type antibody immunoconjugate IT Protein motifs (CDR3 (complementarity determining region 3) of ScFvs; antibodies specific for human C-type lectin, their sequences, recombinant production and their use in diagnosis, prevention and/or treatment of neoplastic disorders) Antibodies and Immunoglobulins RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); BUU (Biological use, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (IgG1, anti-human C-type lectin, heavy chain, 357, 378 and 161; antibodies specific for human C-type lectin, their sequences, recombinant production and their use in diagnosis, prevention and/or treatment of neoplastic disorders) Antibodies and Immunoglobulins TT RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); BUU (Biological use, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (anti-human C-type lectin; antibodies specific for human C-type lectin, their sequences, recombinant production and their use in diagnosis, prevention and/or treatment of neoplastic disorders) IT cDNA sequences (cDNA mol. encoding novel human C-type lectin, its sequence and use in construction plasmid vectors for recombinant protein production) IT Diagnosis (cancer; use of human C-type lectin, anti-human C-type lectin antibodies and/or immunoconjugates in diagnosis, prevention and/or treatment of neoplastic disorders, such as acute myeloid leukemia) Animal cell IT (from human, as host cells; vectors comprising nucleic acid sequences encoding said human C-type lectin or said anti-human C-type lectin antibodies, and their use in transforming host cells) Plasmid vectors IT (pPicZbiFVH, used in generation of bivalent scFv; vectors comprising nucleic acid sequences encoding said

human C-type lectin or said anti-human C-type lectin antibodies, and their use in transforming host cells)

IT Plasmid vectors

> (pqG102-161C03, used in generation of IgG1; vectors comprising nucleic acid sequences encoding said human C-type lectin or said anti-human C-type lectin antibodies, and their use in transforming host cells)

IT Plasmid vectors

> (pgG102-357C03, used in generation of IgG1; vectors comprising nucleic acid sequences encoding said

human C-type lectin or said anti-human C-type lectin antibodies, and their use in transforming host cells)

IT Plasmid vectors

(pqG102-357C13 in generation of chimeric IgG1; vectors

comprising nucleic acid sequences encoding said

human C-type lectin or said anti-human C-type lectin antibodies, and their use in transforming host cells)

IT Plasmid vectors

> (pgG102-378C03, used in generation of IgG1; vectors comprising nucleic acid sequences encoding said

human C-type lectin or said anti-human C-type lectin antibodies, and their use in transforming host cells)

Antibodies and Immunoglobulins TT

> RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); BUU (Biological use, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL

(Biological study); PREP (Preparation); USES (Uses)

(single chain, Fv fragment, SC02-357, SC02-378 and SC02-161; antibodies specific for human C-type lectin, their sequences, recombinant production and their use in diagnosis, prevention and/or treatment of neoplastic disorders)

TT Molecular cloning

(vectors comprising nucleic acid

sequences encoding said human C-type lectin or said anti-human C-type lectin antibodies, and their use in transforming host cells)

IT 823572-15-2

> RL: BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); USES (Uses)

(nucleotide sequence; cDNA mol. encoding novel human C-type lectin, its sequence and use in construction plasmid vectors for recombinant protein production)

L93 ANSWER 9 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:123086 CAPLUS

DOCUMENT NUMBER: 142:217394

Combined cancer treatment methods using selected TITLE:

antibodies against aminophospholipids

Thorpe, Philip E.; Huang, Xianming; Ran, Sophia INVENTOR(S):

PATENT ASSIGNEE(S): USA

U.S. Pat. Appl. Publ., 182 pp., Cont.-in-part of U.S. SOURCE:

Ser. No. 621,269. CODEN: USXXCO

Patent DOCUMENT TYPE:

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 17

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005031620	A1	20050210	US 2003-642058	20030815
US 2004170620	A1	20040902	US 2003-621269	20030715
PRIORITY APPLN. INFO.:			US 2002-396263P	20020715
			US 2003-621269 A	2 20030715

Entered STN: 13 Feb 2005 ED

The invention provides new methods and compns. for safe and effective AB tumor vascular targeting, anti-angiogenesis and tumor destruction, which methods and compns. are also surprisingly effective in treating viral infections and related diseases. The invention is based, in part, on discoveries concerning the expression and role of anionic phospholipids in tumor vasculature and the involvement of aminophospholipids and anionic

phospholipids in viral entry, replication and spread. The present invention further provides particularly advantageous antibodies and immunoconjugates that bind to aminophospholipids and anionic phospholipids, and a new class of peptide-based derivs., such as duramycin-based compns., that bind to phosphatidylethanolamine.

IC ICM A61K039-395

INCL 424155100

CC 15-3 (Immunochemistry)

Section cross-reference(s): 1, 63

ST antibody aminophospholipid duramycin immunoconjugate diagnosis cancer viral infection; anticancer antiviral antibody aminophospholipid duramycin immunoconjugate

IT DNA sequences

Protein sequences

(3G4 antibody-specifying; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)

IT Ricins

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(A, deglycosylated; aminophospholipid-specific antibodies,
immunoconjugates and duramycin-based compds. for treating and
diagnosing cancer and viral infections)

IT Chemokines

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (C-X-C, ELR (Glu-Leu-Arg); aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)

IT CD antiqens

RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (CD106; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)

IT Antibodies and Immunoglobulins

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
(Biological study); PREP (Preparation); USES (Uses)
(IgG; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing
cancer and viral infections)

IT Viscum album coloratum

(Korean mistletoe, extract; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)

IT Leukemia inhibitory factor

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (LIF; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)

IT Chemokines

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (Mig (monokine induced by interferon-γ); aminophospholipidspecific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)

IT Proteins

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(RIP (ribosome-inactivating protein); aminophospholipid-specific
antibodies, immunoconjugates and duramycin-based compds. for treating
and diagnosing cancer and viral infections)

```
IT
    Chemokines
    RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (SDF-1 (stromal-derived factor-1); aminophospholipid-specific
        antibodies, immunoconjugates and duramycin-based compds. for treating
        and diagnosing cancer and viral infections)
ΙT
    Proteins
    RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (TRAIL (tumor necrosis factor-related apoptosis-inducing ligand);
        aminophospholipid-specific antibodies, immunoconjugates and
        duramycin-based compds. for treating and diagnosing
        cancer and viral infections)
IT
    Annexins
    RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (V; aminophospholipid-specific antibodies, immunoconjugates and
       duramycin-based compds. for treating and diagnosing
        cancer and viral infections)
    Cell adhesion molecules
TΤ
    RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (VCAM-1 (vascular cell adhesion mol. 1); aminophospholipid-specific
        antibodies, immunoconjugates and duramycin-based compds. for treating
        and diagnosing cancer and viral infections)
IT
    Phospholipids, biological studies
    RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (acidic; aminophospholipid-specific antibodies, immunoconjugates and
        duramycin-based compds. for treating and diagnosing
        cancer and viral infections)
IT
    Drug delivery systems
        (aerosols; aminophospholipid-specific antibodies, immunoconjugates and
        duramycin-based compds. for treating and diagnosing
        cancer and viral infections)
IT
    Diagnosis
        (agents, antibody conjugates; aminophospholipid-specific antibodies,
        immunoconjugates and duramycin-based compds. for treating and
        diagnosing cancer and viral infections)
     Phospholipids, biological studies
IT
    RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (amine-containing; aminophospholipid-specific antibodies, immunoconjugates
        and duramycin-based compds. for treating and diagnosing
        cancer and viral infections)
    Alkylating agents, biological
IT
    Angiogenesis inhibitors
    Antibiotics
    Antitumor agents
    Antiviral agents
    Blood analysis
     Chemotherapy
     Coaqulants
     Combination chemotherapy
     Cytotoxic agents
    Hodgkin's disease
    Human
     Imaging agents
     Immunotherapy
    Neoplasm
    Radiotherapy
    Tumor markers
```

```
(aminophospholipid-specific antibodies, immunoconjugates and
        duramycin-based compds. for treating and diagnosing
        cancer and viral infections)
TΤ
    Antibodies and Immunoglobulins
    RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
    DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (aminophospholipid-specific antibodies, immunoconjugates and
        duramycin-based compds. for treating and diagnosing
        cancer and viral infections)
IΤ
    Cardiolipins
    Nucleosides, biological studies
    Phosphatidic acids
    Phosphatidylethanolamines, biological studies
    Phosphatidylqlycerols
    Phosphatidylinositols
    Phosphatidylserines
    RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (aminophospholipid-specific antibodies, immunoconjugates and
        duramycin-based compds. for treating and diagnosing
        cancer and viral infections)
TT
    Fusion proteins (chimeric proteins)
    RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (aminophospholipid-specific antibodies, immunoconjugates and
        duramycin-based compds. for treating and diagnosing
        cancer and viral infections)
TТ
    Radionuclides, biological studies
    RL: DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study);
        (aminophospholipid-specific antibodies, immunoconjugates and
        duramycin-based compds. for treating and diagnosing
        cancer and viral infections)
    Anthracyclines
IT
    Cytokines
    Glucocorticoids
    Interferons
    Interleukin 12
    Osteonectin
    Retinoids
    Steroids, biological studies
    Taxanes
    Thrombospondins
    Tumor necrosis factors
    RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (aminophospholipid-specific antibodies, immunoconjugates and
        duramycin-based compds. for treating and diagnosing
        cancer and viral infections)
IT
    CD20 (antigen)
    RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (antibodies to; aminophospholipid-specific antibodies, immunoconjugates
        and duramycin-based compds. for treating and diagnosing
       cancer and viral infections)
IT
    Drugs
        (antibody conjugates; aminophospholipid-specific antibodies,
        immunoconjugates and duramycin-based compds. for treating and
        diagnosing cancer and viral infections)
IT
    Cytotoxic agents
        (antimetabolites; aminophospholipid-specific antibodies,
```

immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections) Antibodies and Immunoglobulins TT RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (bispecific; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections) TТ Diagnosis (cancer; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections) Drug delivery systems IT (carriers; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections) IT Antibodies and Immunoglobulins RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (chimeric; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections) IT Annexins RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (chimeric; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections) IT Imaging X-ray (diagnostic; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections) ITRL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (diphtheria; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections) Blood vessel IT (endothelium, tumor; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections) IT Immunoassay (enzyme-linked immunosorbent assay; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections) IT Toxins RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (exotoxins, Pseudomonas; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections) TΤ Antibodies and Immunoglobulins RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (fragments, Fv, Fab', Fab, diabody, linear antibody or F(ab'), CDR, univalent fragment; aminophospholipid-specific antibodies,

```
immunoconjugates and duramycin-based compds. for treating and
       diagnosing cancer and viral infections)
    Antibodies and Immunoglobulins
IT
    RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
    DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (heavy chain; aminophospholipid-specific
        antibodies, immunoconjugates and duramycin-based compds. for treating
        and diagnosing cancer and viral infections)
    Antibodies and Immunoglobulins
IT
    RL: BPN (Biosynthetic preparation); BSU (Biological study,
    unclassified); DGN (Diagnostic use); PRP (Properties); THU
     (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
        (humanized; aminophospholipid-specific antibodies,
        immunoconjugates and duramycin-based compds. for treating and
        diagnosing cancer and viral infections)
IT
    Drug delivery systems
        (immunoconjugates; aminophospholipid-specific antibodies,
        immunoconjugates and duramycin-based compds. for treating and
        diagnosing cancer and viral infections)
    Diagnosis
IT
        (immunodiagnosis; aminophospholipid-specific antibodies,
        immunoconjugates and duramycin-based compds. for treating and
        diagnosing cancer and viral infections)
    Drug delivery systems
IT
        (immunotoxins; aminophospholipid-specific antibodies, immunoconjugates
        and duramycin-based compds. for treating and diagnosing
        cancer and viral infections)
    Human herpesvirus 5
TT
        (infection; aminophospholipid-specific antibodies, immunoconjugates and
        duramycin-based compds. for treating and diagnosing
        cancer and viral infections)
TT
     Tubulins
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (inhibitors; aminophospholipid-specific antibodies, immunoconjugates
        and duramycin-based compds. for treating and diagnosing
        cancer and viral infections)
IT
    Drug delivery systems
        (injections, i.v.; aminophospholipid-specific antibodies,
        immunoconjugates and duramycin-based compds. for treating and
        diagnosing cancer and viral infections)
     Chemokines
IT
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (interferon y-inducible protein-10, IP-10; aminophospholipid-
        specific antibodies, immunoconjugates and duramycin-based compds. for
        treating and diagnosing cancer and viral
        infections)
    NMR (nuclear magnetic resonance)
TT
        (isotopes; aminophospholipid-specific antibodies, immunoconjugates and
        duramycin-based compds. for treating and diagnosing
        cancer and viral infections)
IT
     Antibodies and Immunoglobulins
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (light chain; aminophospholipid-specific
        antibodies, immunoconjugates and duramycin-based compds. for treating
        and diagnosing cancer and viral infections)
     Antibodies and Immunoglobulins
IT
```

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (monoclonal, 3G4, (ATCC PTA 4545); aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections) IT Antibodies and Immunoglobulins RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (monoclonal; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections) Fibronectins ITLaminins RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (peptides; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections) ITToxins RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (plant-, fungus- or bacteria-derived; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections) IT Drug delivery systems (prodrugs; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections) ΙT Cytokines RL: BSU (Biological study, unclassified); BIOL (Biological study) (proinflammatory; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections) ITDiagnosis (serodiagnosis; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections) IT Antibodies and Immunoglobulins RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (single chain, scFv; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections) IT Neoplasm (solid; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections) IT Apoptosis (tumor cell, inducing; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections) IT Endothelium (vascular, tumor; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections) IT Angiogenic factors RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (vasculostatin; aminophospholipid-specific antibodies, immunoconjugates

and duramycin-based compds. for treating and diagnosing cancer and viral infections)

IT Alkaloids, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (vinca; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)

IT Infection

(viral; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing** cancer and viral infections)

IT Interferons

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (α; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)

IT Integrins

RL: BSU (Biological study, unclassified); BIOL (Biological study) ($\alpha v \beta 3$, antagonists; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)

IT Transforming growth factors

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (β1-; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)

IT Interferons

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (β; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)

IT Interferons

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (γ; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)

IT 92769-12-5, Proliferin (protein)

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (-related protein; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)

IT 9002-62-4, Prolactin, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (16 kDa, fragment; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)

IT 840253-36-3DP, humanized or chimeric derivs. and conjugates 840253-38-5P, 4: PN: US20050031620 SEQID: 4 claimed protein RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (amino acid sequence; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)

IT 140208-23-7 142243-03-6

RL: BSU (Biological study, unclassified); BIOL (Biological study) (aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)

IT 9035-58-9, Blood-coagulation factor III

RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU

(Therapeutic use); BIOL (Biological study); USES (Uses) (aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections) 70-00-8, Trifluorothymidine 127-07-1, Hydroxyurea IT 54-42-2, Idoxuridine 768-94-5, Amantadine 1391-36-2D, Duramycin, conjugates 2056-98-6 7481-89-2, Zalcitabine 3056-17-5, Stavudine 5536-17-4, Vidarabine 13392-28-4, Rimantadine 30516-87-1, AZT 36791-04-5, Ribavirin 59277-89-3, Acyclovir 39809-25-1, Penciclovir 69655-05-6, Didanosine 82410-32-0, Gancyclovir 113852-37-2, Cidofovir 77181-69-2, Sorivudine 114977-28-5, Docetaxel 120082-86-2 127779-20-8, Saguinavir 129556-87-2, Adefovir diphosphate 129618-40-2, Nevirapine 134678-17-4, 136817-59-9, Delavirdine Lamivudine 136470-78-5, Abacavir Lamivudine 136470-78-139110-80-8, Zanamivir 142340-99-6, Adefovir dipivoxil 142937-65-3 143188-53-8, Lamivudine triphosphate 145819-92-7, Emtricitabine 150378-17-9, Indinavir 154598-52-4, Efavirenz triphosphate 155213-67-5, Ritonavir 159989-64-7, Nelfinavir 161814-49-9, Amprenavir 196618-13-0, Oseltamivir 717854-15-4, Multinucleoside resistance A 717854-16-5, Multinucleoside resistance B RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections) 50-18-0, Cyclophosphamide 50-35-1, Thalidomide IT 50-02-2, Dexamethasone 51-21-8, Fluorouracil 50-76-0, Actinomycin D 53-06-5, Cortisone 53-79-2, Puromycin 55-86-7, Nitrogen mustard 57-22-7, Vincristine 59-05-2, Methotrexate 64-86-8, Colchicine 66-22-8, Uracil, biological studies 66-81-9, Cycloheximide 67-99-2, Aspergillin 145-63-1, Suramin 147-94-4, Cytarabine 148-82-3, Melphalan 305-03-3, Chlorambucil 362-07-2 477-30-5, Colcemid 865-21-4, Vinblastine 1404-00-8, Mitomycin 1404-04-2, Neomycin 1406-72-0, Restrictocin 1407-48-3, α -Sarcin 2998-57-4, Estramustine 4375-07-9, Epipodophyllotoxin 7689-03-4, Camptothecin 9001-67-6D, Neuraminidase, antibody conjugates 9001-78-9D, Alkaline phosphatase, antibody conjugates 9001-99-4, Ribonuclease 9004-08-4D, Cathepsin, antibody 9014-01-1D, Subtilisin, antibody conjugates 9014-06-6D, conjugates Penicillin amidase, antibody conjugates 9015-68-3, L-Asparaginase 9016-17-5D, Arylsulfatase, antibody conjugates 9025-05-2D, Cytosine deaminase, antibody conjugates 9031-11-2D, β -Galactosidase, antibody conjugates 9031-98-5D, Carboxypeptidase, antibody conjugates 9073-60-3D, antibody conjugates 9073-78-3D, Thermolysin, antibody 9077-67-2D, D-Alanine carboxypeptidase, antibody conjugates conjugates 10540-29-1, Tamoxifen 11056-06-7, Bleomycin 15663-27-1, Cisplatin 17902-23-7, Tegafur 20830-81-3, Daunorubicin 21679-14-1, Fludarabine 23110-15-8, Fumagillin 23214-92-8, Doxorubicin 25316-40-9, Adriamycin 29767-20-2, Teniposide 31441-78-8, Mercaptopurine 33069-62-4, Teniposide 31441-78-8, Mercaptopurine 33069-62-4, 33419-42-0, Etoposide 37270-94-3, Platelet factor 4 Paclitaxel 37312-62-2D, Serratia extracellular proteinase, antibody conjugates 65271-80-9, 56420-45-2, Epirubicin 62996-74-1, Staurosporine 65646-68-6, Fenretinide 70641-51-9, Edelfosine Mitoxantrone 74578-38-4, UFT 75037-46-6, Gelonin 82855-09-2, Combretastatin 84088-42-6, Linomide 83150-76-9, Octreotide 86090-08-6, Angiostatin 97682-44-5, Irinotecan 95058-81-4, Gemcitabine 98319-26-7, Finasteride 112953-11-4, 7-Hydroxystaurosporine 123948-87-8, Topotecan 129298-91-5 , AGM-1470 146426-40-6, Flavopiridol 156511-34-1, L 739749 160141-09-3, L-744832 187888-07-9, Endostatin 188417-67-6, CM 101 220127-57-1, STI571 (polysaccharide) RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections) IT 9034-40-6, LHRH RL: BSU (Biological study, unclassified); BIOL (Biological study) (antagonists; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections) 80449-01-0, Topoisomerase 124861-55-8, TIMP 2 140208-24-8, TIMP 1 145809-21-8, TIMP 3 186207-03-4, TIMP 4 RL: BSU (Biological study, unclassified); BIOL (Biological study) (inhibitors; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections) 9068-38-6, Reverse transcriptase 144114-21-6, HIV protease ΙT RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (inhibitors; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections) 840253-35-2DP, humanized or chimeric derivs. and conjugates IT 840253-37-4P, 3: PN: US20050031620 SEQID: 3 claimed DNA RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (nucleotide sequence; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections) ΙT 840253-32-9 RL: PRP (Properties) (unclaimed nucleotide sequence; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections) IT840253-34-1 RL: PRP (Properties) (unclaimed protein sequence; aminophospholipidspecific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections) 840253-33-0 ΙT 650591-60-9 716329-62-3 RL: PRP (Properties) (unclaimed sequence; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections) L93 ANSWER 10 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN 2005:15790 CAPLUS ACCESSION NUMBER: DOCUMENT NUMBER: 142:112458 Combinations and kits for cancer treatment TITLE: and diagnosis using selected antibodies to aminophospholipids Thorpe, Philip E.; Huang, Xianming; Ran, Sophia INVENTOR (S): Board of Regents, the University of Texas System, USA PATENT ASSIGNEE(S): U.S. Pat. Appl. Publ., 182 pp., Cont.-in-part of U.S. SOURCE: Ser. No. 621,269. CODEN: USXXCO DOCUMENT TYPE: Patent English LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005002941	A1	20050106	US 2003-642116	20030815
US 2004170620	A1	20040902	US 2003-621269	20030715
PRIORITY APPLN. INFO.:			US 2002-396263P I	20020715
			US 2003-621269 A	2 20030715

- ED Entered STN: 07 Jan 2005
- AB Disclosed are surprising discoveries concerning the role of anionic phospholipids and aminophospholipids in tumor vasculature and in viral entry and spread, and compns. and methods for utilizing these findings in the treatment of cancer and viral infections. Also disclosed are advantageous antibody, immunoconjugate and duramycin-based compns. and combinations that bind and inhibit anionic phospholipids and aminophospholipids, for use in the safe and effective treatment of cancer, viral infections and related diseases.
- IC ICM A61K039-395
 - ICS C07K016-46; C07K016-30
- INCL 424178100; 530388800; 530391100
- CC 15-3 (Immunochemistry)
 - Section cross-reference(s): 1, 3, 13, 14, 63
- ST antibody aminophospholipid duramycin immunoconjugate diagnosis therapy cancer viral infection
- IT Chemokines
 - RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (C-X-C, secondary antitumor agent; antibodies specific to aminophospholipid and immunoconjugates for diagnosis and treatment of cancer and viral infection)
- IT Chemokines
 - RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (ELR, secondary antitumor agent; antibodies specific to aminophospholipid and immunoconjugates for **diagnosis** and treatment of **cancer** and viral infection)
- IT Chemokines
 - RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (Mig (monokine induced by interferon-γ), secondary antitumor
 agent; antibodies specific to aminophospholipid and immunoconjugates
 for diagnosis and treatment of cancer and viral
 infection)
- IT Chemokines
 - RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (SDF-1 (stromal-derived factor-1), secondary antitumor agent; antibodies specific to aminophospholipid and immunoconjugates for diagnosis and treatment of cancer and viral infection)
- IT Proteins
 - RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (TRAIL (tumor necrosis factor-related apoptosis-inducing ligand),
 secondary antitumor agent; antibodies specific to aminophospholipid and
 immunoconjugates for diagnosis and treatment of
 cancer and viral infection)
- IT Diagnosis
 - (agents, antibody conjugates; combinations and kits for cancer treatment using selected antibodies to aminophospholipids)
- IT Cytotoxic agents
 - (antimetabolites, secondary antitumor agent; antibodies specific to aminophospholipid and immunoconjugates for **diagnosis** and treatment of **cancer** and viral infection)
- IT Phosphatidylserines
 - RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU

```
(Therapeutic use); BIOL (Biological study); USES (Uses)
        (as marker of tumor vascularization; combinations and kits
        for cancer treatment using selected antibodies to aminophospholipids)
IT
     Cardiolipins
     Phosphatidic acids
     Phosphatidylethanolamines, biological studies
     Phosphatidylglycerols
     Phosphatidylinositols
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (as tumor and infection markers; combinations and kits for
        cancer treatment using selected antibodies to aminophospholipids)
     Antibodies and Immunoglobulins
IT
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (bispecific, diabody, to phospholipids; antibodies specific to
        aminophospholipid and immunoconjugates for diagnosis and
        treatment of cancer and viral infection)
IT
    Diagnosis
        (cancer; combinations and kits for cancer treatment
        using selected antibodies to aminophospholipids)
IT
     Antibodies and Immunoglobulins
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use);
     THU (Therapeutic use); BIOL (Biological study); USES
        (chimeric, to phospholipids; antibodies specific to
        aminophospholipid and immunoconjugates for diagnosis and
        treatment of cancer and viral infection)
IT
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (diphtheria, secondary antitumor agent; antibodies specific to
        aminophospholipid and immunoconjugates for diagnosis and
        treatment of cancer and viral infection)
IT
     Blood vessel
        (endothelium, phospholipids as markers of; combinations and
        kits for cancer treatment using selected antibodies to
        aminophospholipids)
     Antibodies and Immunoglobulins
TT
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (engineered, to phospholipids; antibodies specific to aminophospholipid
        and immunoconjugates for diagnosis and treatment of
        cancer and viral infection)
     Viscum album coloratum
IT
        (extract, secondary antitumor agent; antibodies specific to
        aminophospholipid and immunoconjugates for diagnosis and
        treatment of cancer and viral infection)
     Fibronectins
IT
     Laminins
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (fragment, secondary antitumor agent; antibodies specific to
        aminophospholipid and immunoconjugates for diagnosis and
        treatment of cancer and viral infection)
TΤ
     Antibodies and Immunoglobulins
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (fragments, CDR, to phospholipids; antibodies specific to
        aminophospholipid and immunoconjugates for diagnosis and
        treatment of cancer and viral infection)
     Antibodies and Immunoglobulins
IT
```

```
RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (fragments, F(ab')2, to phospholipids; antibodies specific to
       aminophospholipid and immunoconjugates for diagnosis and
        treatment of cancer and viral infection)
IT
    Antibodies and Immunoglobulins
    RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (fragments, Fab, to phospholipids; antibodies specific to
       aminophospholipid and immunoconjugates for diagnosis and
        treatment of cancer and viral infection)
    Antibodies and Immunoglobulins
IT
    RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (fragments, Fab', to phospholipids; antibodies specific to
        aminophospholipid and immunoconjugates for diagnosis and
        treatment of cancer and viral infection)
    Antibodies and Immunoglobulins
IT
    RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (fragments, Fv, to phospholipids; antibodies specific to
        aminophospholipid and immunoconjugates for diagnosis and
        treatment of cancer and viral infection)
    Antibodies and Immunoglobulins
IT
    RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (fragments, antigen-binding, to phospholipids; antibodies specific to
        aminophospholipid and immunoconjugates for diagnosis and
        treatment of cancer and viral infection)
IT
    Antibodies and Immunoglobulins
    RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (fragments, scFv, to phospholipids; antibodies specific to
        aminophospholipid and immunoconjugates for diagnosis and
        treatment of cancer and viral infection)
IT
    Antibodies and Immunoglobulins
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (heavy chain; combinations and kits for cancer
        treatment using selected antibodies to aminophospholipids)
IT
    Antibodies and Immunoglobulins
     RL: BPN (Biosynthetic preparation); BSU (Biological study,
     unclassified); DGN (Diagnostic use); PRP (Properties); THU
     (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
        (humanized; combinations and kits for cancer treatment using
        selected antibodies to aminophospholipids)
IT
        (immunodiagnosis; combinations and kits for cancer treatment
        using selected antibodies to aminophospholipids)
IT
     Apoptosis
        (inducing agent, secondary antitumor agent; antibodies specific to
        aminophospholipid and immunoconjugates for diagnosis and
        treatment of cancer and viral infection)
TΤ
     Tubulins
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (inhibiting drug, secondary antitumor agent; antibodies specific to
        aminophospholipid and immunoconjugates for diagnosis and
        treatment of cancer and viral infection)
```

```
IT
     Translation, genetic
        (inhibitors, secondary antitumor agent; antibodies specific to
        aminophospholipid and immunoconjugates for diagnosis and
        treatment of cancer and viral infection)
TΤ
     CD20 (antigen)
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (inhibitors, secondary antitumor agent; antibodies specific to
        aminophospholipid and immunoconjugates for diagnosis and
        treatment of cancer and viral infection)
IT
     Chemokines
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (interferon γ-inducible protein-10, secondary antitumor agent;
        antibodies specific to aminophospholipid and immunoconjugates for
        diagnosis and treatment of cancer and viral
        infection)
     Antibodies and Immunoglobulins
IT
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (light chain; combinations and kits for cancer
        treatment using selected antibodies to aminophospholipids)
IT
     Antibodies and Immunoglobulins
     RL: BPN (Biosynthetic preparation); DGN (Diagnostic use); THU (Therapeutic
     use); BIOL (Biological study); PREP (Preparation); USES (Uses)
        (monoclonal, 1B12, anti-phosphatidylserine; antibodies specific to
        aminophospholipid and immunoconjugates for diagnosis and
        treatment of cancer and viral infection)
IT
     Antibodies and Immunoglobulins
     RL: BPN (Biosynthetic preparation); DGN (Diagnostic use); THU (Therapeutic
    use); BIOL (Biological study); PREP (Preparation); USES (Uses)
        (monoclonal, 1B9, anti-phosphatidylserine; antibodies specific to
        aminophospholipid and immunoconjugates for diagnosis and
        treatment of cancer and viral infection)
IT
    Antibodies and Immunoglobulins
    RL: BPN (Biosynthetic preparation); DGN (Diagnostic use); THU (Therapeutic
    use); BIOL (Biological study); PREP (Preparation); USES (Uses)
        (monoclonal, 2G7, anti-phosphatidylserine; antibodies specific to
        aminophospholipid and immunoconjugates for diagnosis and
        treatment of cancer and viral infection)
     Antibodies and Immunoglobulins
IT
     RL: BPN (Biosynthetic preparation); DGN (Diagnostic use); THU (Therapeutic
     use); BIOL (Biological study); PREP (Preparation); USES (Uses)
        (monoclonal, 3B10, anti-phosphatidylserine; antibodies specific to
        aminophospholipid and immunoconjugates for diagnosis and
        treatment of cancer and viral infection)
    Antibodies and Immunoglobulins
IT
     RL: BPN (Biosynthetic preparation); DGN (Diagnostic use); THU (Therapeutic
    use); BIOL (Biological study); PREP (Preparation); USES (Uses)
        (monoclonal, 3SB, anti-phosphatidylserine; antibodies specific to
        aminophospholipid and immunoconjugates for diagnosis and
        treatment of cancer and viral infection)
     Antibodies and Immunoglobulins
IT
     RL: BPN (Biosynthetic preparation); DGN (Diagnostic use); THU (Therapeutic
     use); BIOL (Biological study); PREP (Preparation); USES (Uses)
        (monoclonal, 7C5, anti-phosphatidylserine; antibodies specific to
        aminophospholipid and immunoconjugates for diagnosis and
        treatment of cancer and viral infection)
     Antibodies and Immunoglobulins
IT
     RL: BPN (Biosynthetic preparation); DGN (Diagnostic use); THU (Therapeutic
     use); BIOL (Biological study); PREP (Preparation); USES (Uses)
```

(monoclonal, 9D2, anti-phosphatidylserine; antibodies specific to aminophospholipid and immunoconjugates for diagnosis and treatment of cancer and viral infection) Antibodies and Immunoglobulins RL: BPN (Biosynthetic preparation); DGN (Diagnostic use); THU (Therapeutic

use); BIOL (Biological study); PREP (Preparation); USES (Uses) (monoclonal, D11, anti-phosphatidylserine; antibodies specific to aminophospholipid and immunoconjugates for diagnosis and treatment of cancer and viral infection)

IT Protein sequences

cDNA sequences

(of antibodies to aminophospholipids, of mouse; combinations and kits for cancer treatment using selected antibodies to aminophospholipids)

IT Tumor markers

(phospholipids as; combinations and kits for cancer treatment using selected antibodies to aminophospholipids)

IT Cytokines

IT

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (proinflammatory, secondary antitumor agent; antibodies specific to aminophospholipid and immunoconjugates for diagnosis and treatment of cancer and viral infection)

IT Angiogenesis inhibitors

Drugs

Radiopharmaceuticals

(secondary antitumor agent; antibodies specific to aminophospholipid and immunoconjugates for **diagnosis** and treatment of **cancer** and viral infection)

IT Cytokines

Glucocorticoids
Interleukin 12
Leukemia inhibitory factor
Osteonectin
Retinoids
Taxanes

Thrombospondins

Tumor necrosis factors

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (secondary antitumor agent; antibodies specific to aminophospholipid and immunoconjugates for diagnosis and treatment of cancer and viral infection)

IT Endothelium

(vascular, phospholipids as markers of; combinations and kits for cancer treatment using selected antibodies to aminophospholipids)

IT Angiogenic factors

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (vasculostatin, secondary antitumor agent; antibodies specific to aminophospholipid and immunoconjugates for diagnosis and treatment of cancer and viral infection)

IT Alkaloids, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (vinca, secondary antitumor agent; antibodies specific to aminophospholipid and immunoconjugates for diagnosis and treatment of cancer and viral infection)

IT Interferons

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (α, secondary antitumor agent; antibodies specific to aminophospholipid and immunoconjugates for diagnosis and treatment of cancer and viral infection)

IT Integrins

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

 $(\alpha\nu\beta3,$ secondary antitumor agent; antibodies specific to aminophospholipid and immunoconjugates for ${\bf diagnosis}$ and treatment of ${\bf cancer}$ and viral infection)

IT Interferons

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (β, secondary antitumor agent; antibodies specific to aminophospholipid and immunoconjugates for **diagnosis** and treatment of **cancer** and viral infection)

IT Transforming growth factors

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (β1-, secondary antitumor agent; antibodies specific to aminophospholipid and immunoconjugates for diagnosis and treatment of cancer and viral infection)

IT Interferons

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (γ, secondary antitumor agent; antibodies specific to aminophospholipid and immunoconjugates for diagnosis and treatment of cancer and viral infection)

IT 821913-73-9P

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (amino acid sequence; antibodies specific to aminophospholipid and immunoconjugates for diagnosis and treatment of cancer and viral infection)

IT 821913-71-7P

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(amino acid sequence; antibodies specific to aminophospholipid and immunoconjugates for **diagnosis** and treatment of **cancer** and viral infection)

IT 9034-40-6, LHRH

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (antagonist, secondary antitumor agent; antibodies specific to aminophospholipid and immunoconjugates for diagnosis and treatment of cancer and viral infection)

IT 7440-70-2, Calcium, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (flux inducing drug, secondary antitumor agent; antibodies specific to aminophospholipid and immunoconjugates for diagnosis and treatment of cancer and viral infection)

IT 80449-01-0, Topoisomerase

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (inhibitors, secondary antitumor agent; antibodies specific to aminophospholipid and immunoconjugates for diagnosis and treatment of cancer and viral infection)

IT 821913-72-8 821913-74-0

RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (nucleotide sequence; antibodies specific to aminophospholipid and immunoconjugates for diagnosis and treatment of cancer and viral infection)

50-02-2, Dexamethasone TT 50-18-0, Cyclophosphamide 50-35-1, Thalidomide 50-44-2, 6-Mercaptopurine 50-76-0, Actinomycin D 50-91-9, 5-Fluoro-2'-deoxyuridine 51-21-8, Fluorouracil 53-06-5, Cortisone 55-86-7, Nitrogen mustard 57-22-7, Vincristine 53-79-2, Puromycin 64-86-8, Colchicine 66-22-8, Uracil, biological 59-05-2, Methotrexate studies 66-81-9, Cycloheximide 127-07-1, Hydroxyurea 148-82-3, Melphalan Suramin 147-94-4, Cytarabine 305-03-3,

```
362-07-2
                             477-30-5, Colcemid
                                                 518-28-5, Podophyllotoxin
    Chlorambucil
    865-21-4, Vinblastine 1404-00-8, Mitomycin 1404-04-2, Neomycin
    2998-57-4, Estramustine 7689-03-4, Camptothecin 9015-68-3,
    L-Asparaginase 10540-29-1, Tamoxifen 11056-06-7, Bleomycin
    15663-27-1, Cisplatin 17902-23-7, Tegafur 20830-81-3, Daunorubicin
    21679-14-1, Fludarabine 23110-15-8, Fumagillin 23214-92-8, Doxorubicin
    25316-40-9, Adriamycin 29767-20-2, Teniposide 33069-62-4, Taxol
    33419-42-0, Etoposide 37270-94-3, Platelet factor 4 56420-45-2,
    Epirubicin 62996-74-1, Staurosporine 65271-80-9, Mitoxantrone
    65646-68-6, Fenretinide 70641-51-9, Edelfosine 74578-38-4, UFT
    83150-76-9, Octreotide
                            84088-42-6, Linomide 86090-08-6, Angiostatin
    92769-12-5, Proliferin
                            95058-81-4, Gemcitabine 97682-44-5, Irinotecan
    98319-26-7, Finasteride 112953-11-4, UCN-01 114977-28-5, Docetaxel
    123948-87-8, Topotecan
                            124861-55-8 129298-91-5, TNP-470 140208-23-7,
    Plasminogen activator inhibitor 1 140208-24-8 142243-03-6, Plasminogen
    activator inhibitor 2 145809-21-8 146426-40-6, Flavopiridol
    156511-34-1, L 739749 160141-09-3, L-744832 186207-03-4
                                                               187888-07-9,
    Endostatin 188417-67-6, CM 101 (polysaccharide) 220127-57-1, STI571
    RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (secondary antitumor agent; antibodies specific to aminophospholipid
       and immunoconjugates for diagnosis and treatment of
       cancer and viral infection)
    821917-66-2
    RL: PRP (Properties)
        (unclaimed nucleotide sequence; combinations and kits for
       cancer treatment and diagnosis using selected
       antibodies to aminophospholipids)
    821917-67-3
                 821917-68-4
    RL: PRP (Properties)
        (unclaimed protein sequence; combinations and kits
       for cancer treatment and diagnosis using selected
       antibodies to aminophospholipids)
    650591-60-9
                  716329-62-3
    RL: PRP (Properties)
        (unclaimed sequence; combinations and kits for cancer
       treatment and diagnosis using selected antibodies to
       aminophospholipids)
L93 ANSWER 11 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                       2004:817650 CAPLUS
DOCUMENT NUMBER:
                        141:330779
                        Human monoclonal, bispecific antibodies and fragments
TITLE:
                        specific to TIM-1 antigen for cancer
                        diagnosis and therapy
INVENTOR (S):
                        Landes, Gregory M.; Chen, Francine; Bezabeh, Binyam;
                        Foltz, Ian
PATENT ASSIGNEE(S):
                        Abgenix, Inc., USA
                        PCT Int. Appl., 135 pp.
SOURCE:
                        CODEN: PIXXD2
DOCUMENT TYPE:
                        Patent
LANGUAGE:
                        English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
    PATENT NO.
                       KIND
                              DATE
                                          APPLICATION NO.
    -----
                       ----
                              -----
                                          -----
                                                                -----
    WO 2004084823
                        A2
                              20041007
                                          WO 2004-US8502
                                                                20040319
                        A3 20050915
    WO 2004084823
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
            CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
```

IT

IT

TT

```
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
         TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
             BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
             ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
             SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,
             TD, TG
                                             AU 2004-224390
                                                                     20040319
     AU 2004224390
                          A1
                                 20041007
     CA 2519528
                          AA
                                 20041007
                                             CA 2004-2519528
                                                                     20040319
                                             US 2004-805177
     US 2005084449
                          A1
                                 20050421
                                                                     20040319
                                             EP 2004-757910
                          A2
                                 20060111
                                                                     20040319
     EP 1613750
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK
                                             US 2003-456652P
                                                                 P 20030319
PRIORITY APPLN. INFO.:
                                             WO 2004-US8502
                                                                 W
                                                                    20040319
ED
     Entered STN: 07 Oct 2004
     The invention described herein is related to antibodies directed to the
AB
     antigen TIM-1 (i.e. T cell Iq domain and mucin domain 1) and uses of such
     antibodies. In particular, there are provided fully human monoclonal
     antibodies directed to the antigen TIM-1. Isolated polynucleotide
     sequences encoding, and amino acid sequences comprising, heavy and light
     chain Ig mols., particularly sequences corresponding to contiguous heavy
     and light chain sequences spanning the framework regions (FR's) and/or
     complementarity determining regions (CDR's), specifically from FR1
     through FR4 or CDR1 through CDR3, are provided.
     Hybridomas or other cell lines expressing such Ig mols. and monoclonal
     antibodies are also provided. The antibodies may also be chimeric,
     humanized, bispecific or scFv, Fab, etc. fragments. These antibodies are
     conjugated with toxin, radioisotope, chemotherapeutic agent or therapeutic
     agent for diagnosis and treatment of cancer and inflammation.
IC
     ICM A61K
CC
     15-3 (Immunochemistry)
     Section cross-reference(s): 3, 9, 63
     chimeric humanized human monoclonal antibody fragment TIM1 antigen
ST
     cancer; inflammation carcinoma cancer diagnosis
     therapy antibody human TIM1 antigen; antibody T cell Ig domain and mucin
     domain 1
IT
     Animal cell line
        (CHO; human monoclonal, bispecific antibodies and fragments specific to
        TIM-1 antigen for cancer diagnosis and therapy)
     Antibodies and Immunoglobulins
IT
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (IqG2; human monoclonal, bispecific antibodies and fragments specific
        to TIM-1 antiqen for cancer diagnosis and therapy)
     Antibodies and Immunoglobulins
IT
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (IqG4; human monoclonal, bispecific antibodies and fragments specific
        to TIM-1 antigen for cancer diagnosis and therapy)
IT
     Immunoassay
        (KinExA and BIACORE; human monoclonal, bispecific antibodies and
        fragments specific to TIM-1 antigen for cancer
        diagnosis and therapy)
IT
     Antigens
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
```

```
DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (TIM-1; human monoclonal, bispecific antibodies and fragments specific
       to TIM-1 antigen for cancer diagnosis and therapy)
IT
    Gene, animal
    RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
    DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (VH3-33 germline; human monoclonal, bispecific antibodies and fragments
       specific to TIM-1 antigen for cancer diagnosis and
       therapy)
TΤ
    Antibodies and Immunoglobulins
    RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
    DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (bispecific; human monoclonal, bispecific antibodies and fragments
       specific to TIM-1 antigen for cancer diagnosis and
       therapy)
IT
    Diagnosis
        (cancer; human monoclonal, bispecific antibodies and
       fragments specific to TIM-1 antigen for cancer
       diagnosis and therapy)
IT
    Lung, neoplasm
    Ovary, neoplasm
    Prostate gland, neoplasm
    Stomach, neoplasm
        (carcinoma; human monoclonal, bispecific antibodies and fragments
       specific to TIM-1 antigen for cancer diagnosis and
       therapy)
TΤ
    Drug delivery systems
        (carriers; human monoclonal, bispecific antibodies and fragments
       specific to TIM-1 antigen for cancer diagnosis and
TT
    Antibodies and Immunoglobulins
    RL: BPN (Biosynthetic preparation); BSU (Biological study,
    unclassified); DGN (Diagnostic use); PRP (Properties); THU
     (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
        (chimeric; human monoclonal, bispecific antibodies and
       fragments specific to TIM-1 antigen for cancer
       diagnosis and therapy)
    Intestine, neoplasm
IT
        (colon, carcinoma; human monoclonal, bispecific antibodies and
       fragments specific to TIM-1 antigen for cancer
       diagnosis and therapy)
TT
    Carcinoma
    Intestine, neoplasm
        (colon; human monoclonal, bispecific antibodies and fragments specific
       to TIM-1 antigen for cancer diagnosis and therapy)
IT
    Antibodies and Immunoglobulins
    Radionuclides, biological studies
    Toxins
    RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
    DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (conjugates; human monoclonal, bispecific antibodies and fragments
       specific to TIM-1 antigen for cancer diagnosis and
       therapy)
    Medical goods
        (containers; human monoclonal, bispecific antibodies and fragments
```

```
specific to TIM-1 antigen for cancer diagnosis and
        therapy)
IT
     Imaging agents
        (contrast, radiog., label; human monoclonal, bispecific antibodies and
        fragments specific to TIM-1 antigen for cancer
        diagnosis and therapy)
IT
    Uterus, neoplasm
        (endometrium; human monoclonal, bispecific antibodies and fragments
        specific to TIM-1 antigen for cancer diagnosis and
        therapy)
IT
     Antibodies and Immunoglobulins
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (fragments; human monoclonal, bispecific antibodies and fragments
        specific to TIM-1 antigen for cancer diagnosis and
        therapy)
IT
    Carcinoma
        (gastric; human monoclonal, bispecific antibodies and fragments
        specific to TIM-1 antigen for cancer diagnosis and
        therapy)
IT
    Neuroglia, neoplasm
        (glioblastoma; human monoclonal, bispecific antibodies and fragments
        specific to TIM-1 antigen for cancer diagnosis and
        therapy)
IT
    Neoplasm
    Neoplasm
        (head and neck; human monoclonal, bispecific antibodies and fragments
        specific to TIM-1 antigen for cancer diagnosis and
        therapy)
IT
    Antibodies and Immunoglobulins
    RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
    DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (heavy chain; human monoclonal, bispecific
        antibodies and fragments specific to TIM-1 antigen for cancer
        diagnosis and therapy)
IT
    Affinity
    Animal cell
    Animal tissue
    Antitumor agents
      Biomarkers
    Bladder, neoplasm
    Brain, neoplasm
    Carcinoma
    Cell proliferation
    Chemotherapy
      DNA sequences
    Dissociation constant
    Drugs
    Epitopes
    Esophagus, neoplasm
    Head and Neck, neoplasm
    Head and Neck, neoplasm
    Human
    Hybridoma
    Immunotherapy
    Inflammation
    Kidney, neoplasm
    Labels
```

```
Liver, neoplasm
     Lung, neoplasm
     Lymphoma
     Mammalia
    Medical goods
    Melanoma
    Molecular cloning
    Mus
    Neoplasm
     Oryctolagus cuniculus
     Ovary, neoplasm
     Prostate gland, neoplasm
       Protein sequences
     Stomach, neoplasm
     Test kits
        (human monoclonal, bispecific antibodies and fragments specific to
        TIM-1 antigen for cancer diagnosis and therapy)
IT
     Antibodies and Immunoglobulins
     Gene, animal
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
    DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
        (human monoclonal, bispecific antibodies and fragments specific to
        TIM-1 antigen for cancer diagnosis and therapy)
IT
     CD3 (antigen)
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (human monoclonal, bispecific antibodies and fragments specific to
        TIM-1 antigen for cancer diagnosis and therapy)
IT
     Antibodies and Immunoglobulins
     RL: BPN (Biosynthetic preparation); BSU (Biological study,
     unclassified); DGN (Diagnostic use); PRP (Properties); THU
     (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
        (humanized; human monoclonal, bispecific antibodies and
        fragments specific to TIM-1 antigen for cancer
        diagnosis and therapy)
IT
     Drug delivery systems
        (immunoconjugates; human monoclonal, bispecific antibodies and
        fragments specific to TIM-1 antigen for cancer
        diagnosis and therapy)
IT
    Diagnosis
        (immunodiagnosis; human monoclonal, bispecific antibodies and fragments
        specific to TIM-1 antigen for cancer diagnosis and
        therapy)
IT
    Drug delivery systems
        (immunotoxins; human monoclonal, bispecific antibodies and fragments
        specific to TIM-1 antigen for cancer diagnosis and
        therapy)
IT
     Fluorescent substances
        (label; human monoclonal, bispecific antibodies and fragments specific
        to TIM-1 antigen for cancer diagnosis and therapy)
     Antibodies and Immunoglobulins
IT
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (light chain; human monoclonal, bispecific
        antibodies and fragments specific to TIM-1 antigen for cancer
        diagnosis and therapy)
IT
     Epitopes
```

```
(mapping; human monoclonal, bispecific antibodies and fragments
        specific to TIM-1 antigen for cancer diagnosis and
        therapy)
IT
     Containers
        (medical; human monoclonal, bispecific antibodies and fragments
        specific to TIM-1 antigen for cancer diagnosis and
        therapy)
IT
     Antibodies and Immunoglobulins
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (monoclonal, neutralizing; human monoclonal, bispecific antibodies and
        fragments specific to TIM-1 antigen for cancer
        diagnosis and therapy)
     Antibodies and Immunoglobulins
IT
    RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (monoclonal; human monoclonal, bispecific antibodies and fragments
        specific to TIM-1 antigen for cancer diagnosis and
        therapy)
     Antibodies and Immunoglobulins
IΤ
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (neutralizing; human monoclonal, bispecific antibodies and fragments
        specific to TIM-1 antigen for cancer diagnosis and
        therapy)
IT
     Carcinoma
        (ovarian; human monoclonal, bispecific antibodies and fragments
        specific to TIM-1 antigen for cancer diagnosis and
        therapy)
IT
     Carcinoma
        (prostatic; human monoclonal, bispecific antibodies and fragments
        specific to TIM-1 antigen for cancer diagnosis and
        therapy)
IT
     Carcinoma
        (pulmonary; human monoclonal, bispecific antibodies and fragments
        specific to TIM-1 antigen for cancer diagnosis and
        therapy)
    Kidney, neoplasm
IT
        (renal cell carcinoma; human monoclonal, bispecific antibodies and
        fragments specific to TIM-1 antigen for cancer
        diagnosis and therapy)
IT
     Carcinoma
        (renal cell; human monoclonal, bispecific antibodies and fragments
        specific to TIM-1 antigen for cancer diagnosis and
        therapy)
                                   773172-34-2P
                                                  773172-36-4P
                                                                  773172-38-6P
IT
     773172-20-6P
                    773172-32-0P
     773172-40-0P
                    773172-42-2P
                                   773172-44-4P
                                                  773172-46-6P
                                                                  773172-48-8P
                                                  773172-56-8P
     773172-50-2P
                    773172-52-4P
                                   773172-54-6P
                                                                  773172-58-0P
     773172-60-4P
                   773172-62-6P
                                   773172-64-8P
                                                  773172-66-0P
                                                                  773172-68-2P
     773172-70-6P
                   773172-71-7P
                                   773172-73-9P
                                                  773172-75-1P
                                                                  773172-77-3P
     773172-79-5P
                   773172-81-9P
                                   773172-83-1P
                                                  773172-84-2P
                                                                  773172-85-3P
     773172-86-4P
                   773172-87-5P
                                   773172-88-6P
                                                  773172-89-7P
                                                                  773172-90-0P
     773172-91-1P
                   773172-92-2P
                                   773172-93-3P
                                                  773172-94-4P
                                                                  773172-95-5P
     773172-96-6P
                    773172-97-7P
                                   773172-98-8P
                                                  773172-99-9P
                                                                  773173-00-5P
     773173-01-6P
                    773173-02-7P
                                   773173-03-8P
                                                  773173-04-9P
                                                                 773173-06-1P
     773173-08-3P
                   773173-09-4P
                                   773173-10-7P
    RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
```

```
DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (amino acid sequence; human monoclonal, bispecific antibodies and
        fragments specific to TIM-1 antigen for cancer
       diagnosis and therapy)
IT
     773173-12-9
    RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP
     (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (amino acid sequence; human monoclonal, bispecific antibodies and
        fragments specific to TIM-1 antigen for cancer
        diagnosis and therapy)
     773055-75-7
IT
    RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP
     (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (human monoclonal, bispecific antibodies and fragments specific to
        TIM-1 antigen for cancer diagnosis and therapy)
IT
                   773172-31-9P
                                   773172-33-1P
                                                  773172-35-3P
                                                                 773172-37-5P
     773158-10-4P
     773172-39-7P
                    773172-41-1P
                                   773172-43-3P
                                                  773172-45-5P
                                                                 773172-47-7P
                                   773172-53-5P
                                                  773172-55-7P
                                                                 773172-57-9P
     773172-49-9P
                    773172-51-3P
                                                  773172-65-9P
                                                                 773172-67-1P
     773172-59-1P
                    773172-61-5P
                                   773172-63-7P
                                                  773172-76-2P
     773172-69-3P
                    773172-72-8P
                                   773172-74-0P
                                                                 773172-78-4P
                    773172-82-0P
                                   773173-05-0P
                                                  773173-07-2P
     773172-80-8P
    RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
    DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (nucleotide sequence; human monoclonal, bispecific antibodies and
        fragments specific to TIM-1 antigen for cancer
        diagnosis and therapy)
ΙT
     773173-11-8
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP
     (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (nucleotide sequence; human monoclonal, bispecific antibodies and
        fragments specific to TIM-1 antigen for cancer
        diagnosis and therapy)
IT
     773173-89-0
                   773173-90-3
                                 773173-91-4
                                               773173-92-5
     RL: PRP (Properties)
        (unclaimed nucleotide sequence; human monoclonal, bispecific antibodies
        and fragments specific to TIM-1 antigen for cancer
        diagnosis and therapy)
IT
     773055-76-8
                  773055-77-9
                                 773055-78-0
                                               773055-79-1
                                                             773055-80-4
     773055-81-5
                   773055-82-6
                                 773055-83-7
                                               773055-84-8
                                                             773055-85-9
     773055-86-0
                   773055-87-1
                                 773055-88-2
                                               773055-89-3
                                                             773055-90-6
     773055-91-7
                   773055-92-8
                                 773055-93-9
                                               773173-65-2
                                                             773173-66-3
     773173-67-4
                   773173-68-5
                                 773173-69-6
                                               773173-70-9
                                                             773173-71-0
     773173-72-1
                   773173-73-2
                                 773173-74-3
                                               773173-75-4
                                                             773173-76-5
     773173-77-6
                   773173-78-7
                                 773173-79-8
                                               773173-80-1
                                                             773173-81-2
     773173-82-3
                   773173-83-4
                                 773173-84-5
                                               773173-85-6
                                                             773173-86-7
     773173-87-8
                   773173-88-9
     RL: PRP (Properties)
        (unclaimed sequence; human monoclonal, bispecific antibodies and
        fragments specific to TIM-1 antigen for cancer
        diagnosis and therapy)
L93 ANSWER 12 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                         2004:696390 CAPLUS
DOCUMENT NUMBER:
                         141:224000
TITLE:
                         CDR-grafted antibodies and fragments specific to human
                         interleukin 1ß for treating inflammation,
                         infection, autoimmune disease and cancer
INVENTOR(S):
                         Lawson, Alastair David Griffiths; Popplewell, Andrew
```

George

PATENT ASSIGNEE(S): Celltech R & D Limited, UK SOURCE: PCT Int. Appl., 74 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	TENT :															ATE	
	-																
WO	2004	0721	16		A2		2004	0826	1	WO 2	004-	GB46	3		2	0040	206
WO	2004	0721	16		A3		2004	1118									
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	ВG,	BR,	BW,	BY,	ΒZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AT,	BE,
		BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,	IT,	LU,
		MC,	NL,	PT,	RO,	SE,	sī,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,
		GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG								
UA	2004	2107	76		A1	·	2004	0826		AU 2	004-	2107	76		2	0040	206
CA	2515	474			AA		2004	0826	(CA 2	004-	2515	474		2	0040	206
EP	1597	282			A2		2005	1123]	EP 2	004-	7088	80		2	0040	206
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
								MK,									
BR	2004																
NO	2005	0042	23		Α		2005	1108	3	NO 2	005-	4223			2	0050	912
PRIORIT	Y APP	LN.	INFO	. :					(GB 2	003-	3337		1	A 2	0030	213
-									1	WO 2	004-	GB46	3	7	A 2	040	206

ED Entered STN: 26 Aug 2004

AB The invention relates to murine monoclonal antibody IC8 and antibody mols. derived from IC8 having specificity for antigenic determinants of human IL-1β. The CDR-grafted/humanized IC8 antibodies and fragments are useful for treating IL-1β-associated inflammatory disease, such as infection, endotoxic shock, arthritis, rheumatoid arthritis, pelvic inflammatory disease, multiple sclerosis, asthma, osteoarthritis, psoriasis, Alzheimer's disease, Crohn's disease, Peyronies's disease, heart disease, atherosclerosis, colon cancer, coeliac disease, gallbladder disease, Pilonidal disease, autoimmune disease and others.

IC ICM C07K016-24

ICS C12N015-13; C12N015-85; C12N005-10; A61K039-395

CC 15-3 (Immunochemistry)

Section cross-reference(s): 3, 63

IT Antibodies and Immunoglobulins

RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (IgG; humanized or CDR-grafted antibodies and fragments specific to human interleukin 1β for treating inflammation, infection, autoimmune disease and cancer)

IT Antibodies and Immunoglobulins

RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (fragments; humanized or CDR-grafted antibodies and fragments specific to human interleukin 1β for treating inflammation, infection, autoimmune disease and cancer)

T Antibodies and Immunoglobulins

RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (heavy chain, variable; humanized or

CDR-grafted antibodies and fragments specific to human interleukin 1β for treating inflammation, infection, autoimmune disease and cancer) Alzheimer's disease TΤ Amino group Antitumor agents Arthritis Asthma Atherosclerosis Autoimmune disease Celiac disease DNA sequences Gallbladder, disease Genetic vectors Heart, disease Human Infection Inflammation Molecular cloning Multiple sclerosis Mus . Neoplasm Osteoarthritis Osteoporosis Pain Protein sequences Psoriasis Rheumatoid arthritis Surgery Transplant rejection cDNA sequences (humanized or CDR-grafted antibodies and fragments specific to human interleukin 1β for treating inflammation, infection, autoimmune disease and cancer) IT Antibodies and Immunoglobulins RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (humanized or CDR-grafted antibodies and fragments specific to human interleukin 1\$\beta\$ for treating inflammation, infection, autoimmune disease and cancer) IT Antibodies and Immunoglobulins RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (humanized; humanized or CDR-grafted antibodies and fragments specific to human interleukin 1ß for treating inflammation, infection, autoimmune disease and cancer) IT Antibodies and Immunoglobulins RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (light chain, variable; humanized or CDR-grafted antibodies and fragments specific to human interleukin 1\beta for treating inflammation, infection, autoimmune disease and cancer) Antibodies and Immunoglobulins ITRL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (monoclonal; humanized or CDR-grafted antibodies and fragments specific to human interleukin 1ß for treating inflammation, infection, autoimmune disease and cancer) ITAntibodies and Immunoglobulins

RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (neutralizing; humanized or CDR-grafted antibodies and fragments specific to human interleukin 1β for treating inflammation, infection, autoimmune disease and cancer)

L93 ANSWER 13 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:633951 CAPLUS

DOCUMENT NUMBER: 141:156116

TITLE: Phage display libraries encoding antibody variable domains with diversified CDRs for identifying high

affinity therapeutic and diagnostic antibodies

INVENTOR(S): Bond, Christopher J.

PATENT ASSIGNEE(S): Genentech, Inc., USA

SOURCE: PCT Int. Appl., 238 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA'	TENT	NO.			KIN)	DATE			APPL	ICAT	ION I	NO.		D	ATE	
						-										-	
WO	2004	0654	16		A2	:	2004	0805		WO 2	004-	US10:	97		2	0040	116
WO	2004	0654	16		A 3		2005	0210									
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DΖ,	EC,	EE,	EG,	ES,	FΙ,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	ΚZ,	LC,
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ		
AU	2004	2056	31		A 1	;	2004	0805		AU 2	004-	2056	31		20	0040	116
CA	2510	003			AA	;	2004	0805		CA 2	004-	2510	003		2	0040	116
US	2005	0795	74		A1	;	2005	0414		US 2	004-	7597	31		2	0040	116
EP	1585	767			A2	;	2005	1019		EP 2	004-	7029	25		20	0040	116
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
		IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	SK	
PRIORIT	Y APP	LN.	INFO	. :					,	US 2	003-	4410	59P		P 2	0030	116
										US 2	003-	4886	10P	:	P 2	0030	718
										US 2	003-	5103	14P	:	P 2	0031	800
										WO 2	004-	US10:	97	1	W 2	0040	116

ED Entered STN: 06 Aug 2004

The invention provides Ig polypeptides comprising variant amino acids in AB CDRs of antibody variable domains. In one embodiment, the polypeptide is a variable domain of a monobody and has a variant CDRH3 region. polypeptides provide a source of great sequence diversity that can be used as a source for identifying novel antigen binding polypeptides. invention also provides these polypeptides as fusion polypeptides to heterologous polypeptides such as at least a portion of phage or viral coat proteins, tags and linkers. Libraries comprising a plurality of these polypeptides are also provided. In addition, methods of and compns. for generating and using these polypeptides and libraries are provided. In example, vector pD1607 encoding anti-her2 humanized antibody 4D5 light chain and heavy chain variable domain sequences scFv, scFvzip, Fab, and Fabzip were constructed for maximizing diversity in the CDR L1-3 and H1-3 regions while minimizing structural perturbations. Similarly, recombinant antibodies comprising Ilamma anti-hCG Camelid monobody variable domain (VHH) were constructed and the amino acid preferences in CDRH3 were identified.

IC ICM C07K016-00

ICS C12N015-13; C12N015-85; C12N005-10

CC 15-3 (Immunochemistry)

```
Section cross-reference(s): 3
IT
     Antibodies and Immunoglobulins
     RL: ARU (Analytical role, unclassified); BPN (Biosynthetic
     preparation); BSU (Biological study, unclassified); DGN
     (Diagnostic use); PRP (Properties); THU (Therapeutic use);
     ANST (Analytical study); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
        (chimeric; phage display libraries encoding antibody variable
        domains with diversified CDRs for identifying high affinity
        therapeutic and diagnostic antibodies)
     Antibodies and Immunoglobulins
IT
     RL: ARU (Analytical role, unclassified); BPN (Biosynthetic preparation);
     BSU (Biological study, unclassified); DGN (Diagnostic use); PRP
     (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (heavy chain; phage display libraries encoding
        antibody variable domains with diversified CDRs for identifying high
        affinity therapeutic and diagnostic antibodies)
IT
     Antibodies and Immunoglobulins
     RL: ARU (Analytical role, unclassified); BPN (Biosynthetic
     preparation); BSU (Biological study, unclassified); DGN
     (Diagnostic use); PRP (Properties); THU (Therapeutic use);
     ANST (Analytical study); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
        (humanized; phage display libraries encoding antibody
        variable domains with diversified CDRs for identifying high
        affinity therapeutic and diagnostic antibodies)
     Antibodies and Immunoglobulins
     RL: ARU (Analytical role, unclassified); BPN (Biosynthetic preparation);
     BSU (Biological study, unclassified); DGN (Diagnostic use); PRP
     (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (light chain; phage display libraries encoding
        antibody variable domains with diversified CDRs for identifying high
        affinity therapeutic and diagnostic antibodies)
IT
     Genetic vectors
        (pS1607; phage display libraries encoding antibody variable domains
        with diversified CDRs for identifying high affinity therapeutic and
        diagnostic antibodies)
IT
     Animal virus
     Camelidae
       DNA sequences
     Immunoassay
     Immunotherapy
     Linking agents
     Molecular cloning
     Mutagenesis
     Phage display library
     Protein sequences
     Test kits
        (phage display libraries encoding antibody variable domains with
        diversified CDRs for identifying high affinity therapeutic and
        diagnostic antibodies)
L93 ANSWER 14 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                         2004:162801 CAPLUS
DOCUMENT NUMBER:
                         140:216176
TITLE:
                         Antibodies directed to MCP-1 or monocyte
                         chemoattractant protein-1 for diagnosis and treatment
```

Tungaturthi 10/635,908 of inflammatory and neoplastic diseases Gudas, Jean M.; Haak-frendscho, Mary; Foord, Orit; INVENTOR (S): Liang, Meina L.; Ahluwalia, Kiran; Bhakta, Sunil PATENT ASSIGNEE(S): Abgenix, Inc., USA PCT Int. Appl., 154 pp. SOURCE: CODEN: PIXXD2 DOCUMENT TYPE: Patent English LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: DATE APPLICATION NO. DATE PATENT NO. KIND ______ --------------------WO 2003-US26232 20030819 WO 2004016769 A2 20040226 WO 2004016769 **A3** 20041014 AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG 20040226 CA 2003-2496419 20030819 CA 2496419 AΑ US 2005058639 **A1** 20050317 US 2003-644277 20030819 EP 2003-788686 EP 1542724 A2 20050622 20030819 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK 20051202 JP 2004-529174 20030819 JP 2005536534 T2 US 2002-404802P P 20020819 PRIORITY APPLN. INFO.: WO 2003-US26232 W 20030819 ED Entered STN: 29 Feb 2004 Embodiments of the invention described herein relate to antibodies AB directed to the antigen monocyte chemoattractant protein-1 (MCP-1) and uses of such antibodies. In particular, in accordance with some embodiments, there are provided fully human monoclonal antibodies directed to the antigen MCP-1. Nucelotide sequences encoding, and amino acid sequences comprising, heavy and light chain Ig mols., particularly sequences corresponding to contiquous heavy and light chain sequences spanning the framework regions and/or complementarity determining regions (CDRs), specifically from FR1 through FR4 or CDR1 through CDR3, are provided. Hybridomas or other cell lines expressing such Iq mols. and monoclonal antibodies are also provided. ICM C12N IC 15-3 (Immunochemistry) Section cross-reference(s): 3, 9, 63 ST monoclonal antibody hybridoma monocyte chemoattractant protein 1 cancer inflammation; MCP1 human monoclonal antibody heavy light chain cancer inflammation IT Animal cell Animal cell line Animal tissue

Animal tissue
Animals
Antitumor agents
Atherosclerosis
Autoimmune disease
Biomarkers
Bladder, neoplasm

```
Blood analysis
Blood serum
Chemotherapy
Cytotoxic agents
Drugs
Fluorescent dyes
Human
Hybridoma
Immunoassay
Immunotherapy
Inflammation
Kidney, neoplasm
Leukemia
Lung, neoplasm
Mammalia
Mammary gland, neoplasm
Melanoma
Molecular cloning
Multiple sclerosis
Neoplasm
Ovary, neoplasm
Pancreas, neoplasm
Prostate gland, neoplasm
  Protein sequences
Psoriasis
Rheumatoid arthritis
Salivary gland, neoplasm
Stomach, neoplasm
Test kits
Thyroid gland, neoplasm
Transplant and Transplantation
  cDNA sequences
   (antibodies directed to MCP-1 or monocyte chemoattractant protein-1 for
   diagnosis and treatment of inflammatory and neoplastic diseases)
Diagnosis
   (cancer; antibodies directed to MCP-1 or monocyte
   chemoattractant protein-1 for diagnosis and treatment of
   inflammatory and neoplastic diseases)
Antibodies and Immunoglobulins
RL: BPN (Biosynthetic preparation); BSU (Biological study,
unclassified); DGN (Diagnostic use); PRP (Properties); THU
(Therapeutic use); BIOL (Biological study); PREP
(Preparation); USES (Uses)
   (chimeric; antibodies directed to MCP-1 or monocyte
   chemoattractant protein-1 for diagnosis and treatment of inflammatory
   and neoplastic diseases)
Antibodies and Immunoglobulins
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
(Biological study); PREP (Preparation); USES (Uses)
   (heavy chain; antibodies directed to MCP-1 or
   monocyte chemoattractant protein-1 for diagnosis and treatment of
   inflammatory and neoplastic diseases)
Antibodies and Immunoglobulins
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
(Biological study); PREP (Preparation); USES (Uses)
   (light chain; antibodies directed to MCP-1 or
   monocyte chemoattractant protein-1 for diagnosis and treatment of
   inflammatory and neoplastic diseases)
```

IT

IT

TТ

IT

L93 ANSWER 15 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:2228 CAPLUS

DOCUMENT NUMBER: 142:92198

TITLE: CDR-containing chimeric ThyOx polypeptides for

therapeutic use Evans, Glen A.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 45 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

INVENTOR(S):

PATI	ENT 1	NO.			KIN)	DATE		i	APPL	[CAT	ION I	. OI		D	ATE	
					77	-	2004	1020	,	JS 2		6116	- 		2.	0030	
	2004				A1		2004			WO 2					_	0040	
	2005	-			A2		2005		,	WO 21	JU4-1	0521.	200		۷.	3040	330
WO A	2005				A3		2005									~~	677
	W:	ΑE,	AG,	AL,	AM,	AT,	ΑU,	AZ,	BA,	вв,	ВG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	ΚP,	KR,	KZ,	LC,
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
		ΤJ,	TM,	TN,	TR,	TT,	TZ,	UΑ,	ŪĠ,	US,	UZ,	VC,	VN,	ΥU,	ZA,	ZM,	ZW
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,
		ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM,	AT,	ΒE,	BG,	CH,	CY,	CZ,	DE,	DK,
		EE,	ES,	FI,	FR,	GB,	GR,	ΗU,	ΙE,	IT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,
		SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,
		SN,	TD,	TG													
RITY	APP	LN.	INFO	. :					1	US 2	003-	6116	55	1	A 20	0030	630

PRIORITY APPLN. INFO.:
ED Entered STN: 31 Dec 2004

The invention provides a chimeric non-Ig binding polypeptide having an Iq-like domain containing scaffold having two or more solvent exposed loops containing a different CDR from a parent antibody inserted into each of said two or more loops and exhibiting selective binding activity toward a ligand bound by said parent antibody. The chimeric non-Ig binding polypeptide has an Ig-like domain containing scaffold having less than about 20% sequence identity to a human Ig variable region framework domain, said Iq-like domain containing scaffold having two or more altered solvent exposed loops and exhibiting selective binding activity toward a disparate ligand. A chimeric ThyOx binding polypeptide having one or more altered Ig-like domain loop regions of a ThyOx family polypeptide and having selective binding activity toward a non-ThyOx ligand as well as a chimeric ThyOx carrier polypeptide comprising a at least one Ig-like domain containing scaffold derived from a ThyOx family polypeptide, and a heterologous binding polypeptide exhibiting selective binding activity toward a non-ThyOx ligand are further provided. Addnl., the invention provides nucleic acids encoding a non-Ig or ThyOx binding polypeptide of the invention. The non-Iq binding polypeptide is a ThyOx family polypeptide such as Thy-1, Ox2, CD7, Ox2-like protein or Ox2 homolog. The Ig.-like domain is selected from T cell receptor, CD8, CD4, CD2, class I MHC, class II MHC, CD1, cytokine receptor, G-CSF receptor, GM-CSF receptor, hormone receptor, growth hormone receptor, erythropoietin receptor, interferon receptor, interferon γ receptor, prolactin receptor, NCAM, VACM, ICAM, N-cadherin, E-cadherin, fibronectin, tenascin, and I-set-containing domain polypeptides, or a functional fragment. Such chimeric polypeptides containing anti-fibrin VH CDR1 loop, erythropoietin and glucagon-like peptide 1 were prepared for therapeutic uses.

AB

```
ICM C07K016-44
IC
INCL 530387300
    15-3 (Immunochemistry)
     Section cross-reference(s): 1, 3
IT
    DNA sequences
    Drug design
    Human
     Immunotherapy
    Molecular cloning
     Protein sequences
       cDNA sequences
        (CDR-containing chimeric ThyOx polypeptides for therapeutic use)
ΙT
     Fusion proteins (chimeric proteins)
      Nucleic acids
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
        (CDR-containing chimeric ThyOx polypeptides for therapeutic use)
TT
     Antibodies and Immunoglobulins
    RL: BPN (Biosynthetic preparation); BSU (Biological study,
     unclassified); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (chimeric, fragment; CDR-containing chimeric
        ThyOx polypeptides for therapeutic use)
ΤТ
     Antibodies and Immunoglobulins
     RL: BPN (Biosynthetic preparation); BSU (Biological study,
     unclassified); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (fragments; CDR-containing chimeric ThyOx polypeptides
        for therapeutic use)
     Antibodies and Immunoglobulins
TΤ
     RL: BPN (Biosynthetic preparation); BSU (Biological study,
     unclassified); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (heavy chain; CDR-containing chimeric
        ThyOx polypeptides for therapeutic use)
TΤ
     Antibodies and Immunoglobulins
     RL: BPN (Biosynthetic preparation); BSU (Biological study,
     unclassified); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (humanized, fragment; CDR-containing chimeric
        ThyOx polypeptides for therapeutic use)
IT
     819097-85-3P
                   819097-86-4P
                                   819097-88-6P, DNA (synthetic
     plasmid vector pEqeaM3)
                               819097-89-7P, DNA (synthetic
     plasmid vector pEqeaQ6)
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
        (nucleotide sequence; CDR-containing chimeric ThyOx polypeptides for
        therapeutic use)
L93 ANSWER 16 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN
                         2004:934146 CAPLUS
ACCESSION NUMBER:
DOCUMENT NUMBER:
                         141:409777
TITLE:
                         Aminophospholipid-specific antibodies,
                         immunoconjugates and duramycin-based compounds for
                         treating and diagnosing cancer and
                         viral infections
INVENTOR(S):
                         Thorpe, Philip E.; Ran, Sophia
PATENT ASSIGNEE(S):
                         USA
```

SOURCE: U.S. Pat. Appl. Publ., 181 pp., Cont.-in-part of U.S.

Ser. No. 621,269. CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 17

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
				-	-
US 2004219155	A1	20041104	US 2003-642099		20030815
US 2004170620	A1	20040902	US 2003-621269		20030715
PRIORITY APPLN. INFO.:			US 2002-396263P	P	20020715
			US 2003-621269	A2	20030715

ED Entered STN: 06 Nov 2004

AB The invention provides new methods and compns. for safe and effective tumor vascular targeting, anti-angiogenesis and tumor destruction, which methods and compns. are also surprisingly effective in treating viral infections and related diseases. The invention is based, in part, on discoveries concerning the expression and role of anionic phospholipids in tumor vasculature and the involvement of aminophospholipids and anionic phospholipids in viral entry, replication and spread. The present invention further provides particularly advantageous antibodies and immunoconjugates that bind to aminophospholipids and anionic phospholipids, and a new class of peptide-based derivs., such as duramycin-based compns., that bind to phosphatidylethanolamine.

IC ICM A61K039-395

ICS C07K016-46 INCL 424178100; 530391100

CC 15-3 (Immunochemistry)

Section cross-reference(s): 1, 63

ST antibody aminophospholipid duramycin immunoconjugate diagnosis cancer viral infection; anticancer antiviral antibody aminophospholipid duramycin immunoconjugate

IT DNA sequences

Protein sequences

(3G4 antibody-specifying; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)

IT Ricins

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(A, deglycosylated; aminophospholipid-specific antibodies,
immunoconjugates and duramycin-based compds. for treating and
diagnosing cancer and viral infections)

IT CD antigens

RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (CD106; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)

IT Chemokines

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(ELR- CXC; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)

IT Antibodies and Immunoglobulins

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(IqG; aminophospholipid-specific antibodies, immunoconjugates and

duramycin-based compds. for treating and diagnosing cancer and viral infections) Viscum album coloratum IT (Korean mistletoe, extract; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections) IT Leukemia inhibitory factor RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (LIF; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections) IT Chemokines RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (Mig (monokine induced by interferon-γ); aminophospholipidspecific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections) IT Proteins RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (RIP (ribosome-inactivating protein); aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections) IT Chemokines RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (SDF-1 (stromal-derived factor-1); aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections) Enzymes, biological studies IT RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (Serratia protease, antibody conjugates; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections) IT Proteins RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (TRAIL (tumor necrosis factor-related apoptosis-inducing ligand); aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections) IT Annexins RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (V; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections) Cell adhesion molecules IT RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (VCAM-1 (vascular cell adhesion mol. 1); aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections) IT Phospholipids, biological studies RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (acidic; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections) IT Drug delivery systems (aerosols; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing

cancer and viral infections)

```
IT
    Diagnosis
        (agents, antibody conjugates; aminophospholipid-specific antibodies,
        immunoconjugates and duramycin-based compds. for treating and
        diagnosing cancer and viral infections)
     Phospholipids, biological studies
IT
    RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (amine-containing; aminophospholipid-specific antibodies, immunoconjugates
        and duramycin-based compds. for treating and diagnosing
        cancer and viral infections)
IT
    Alkylating agents, biological
    Angiogenesis inhibitors
    Antibiotics
    Antitumor agents
    Antiviral agents
     Chemotherapy
     Coaqulants
     Cytotoxic agents
    Human
     Imaging agents
     Immunotherapy
    Linking agents
    Molecular cloning
    Neoplasm
    Radiotherapy
    Tumor markers
        (aminophospholipid-specific antibodies, immunoconjugates and
        duramycin-based compds. for treating and diagnosing
        cancer and viral infections)
    Antibodies and Immunoglobulins
    RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
    DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (aminophospholipid-specific antibodies, immunoconjugates and
        duramycin-based compds. for treating and diagnosing
        cancer and viral infections)
    Cardiolipins
IT
    Nucleosides, biological studies
    Phosphatidic acids
    Phosphatidylethanolamines, biological studies
    Phosphatidylglycerols
    Phosphatidylinositols
    Phosphatidylserines
    RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (aminophospholipid-specific antibodies, immunoconjugates and
        duramycin-based compds. for treating and diagnosing
        cancer and viral infections)
    Fusion proteins (chimeric proteins)
IT
    RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (aminophospholipid-specific antibodies, immunoconjugates and
        duramycin-based compds. for treating and diagnosing
        cancer and viral infections)
IT
    Radionuclides, biological studies
    RL: DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study);
    USES (Uses)
        (aminophospholipid-specific antibodies, immunoconjugates and
        duramycin-based compds. for treating and diagnosing
        cancer and viral infections)
```

```
IT
    Anthracyclines
    Cvtokines
    Glucocorticoids
     Interferons
     Interleukin 12
    Osteonectin
    Retinoids
     Steroids, biological studies
     Taxanes
     Thrombospondins
     Tumor necrosis factors
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (aminophospholipid-specific antibodies, immunoconjugates and
        duramycin-based compds. for treating and diagnosing
        cancer and viral infections)
IT
    Blood serum
        (anal.; aminophospholipid-specific antibodies, immunoconjugates and
        duramycin-based compds. for treating and diagnosing
        cancer and viral infections)
IT
     CD20 (antigen)
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (anti-; aminophospholipid-specific antibodies, immunoconjugates and
        duramycin-based compds. for treating and diagnosing
        cancer and viral infections)
IT
     Drugs
        (antibody conjugates; aminophospholipid-specific antibodies,
        immunoconjugates and duramycin-based compds. for treating and
        diagnosing cancer and viral infections)
     Cytotoxic agents
TT
        (antimetabolites; aminophospholipid-specific antibodies,
        immunoconjugates and duramycin-based compds. for treating and
        diagnosing cancer and viral infections)
     Antibodies and Immunoglobulins
IT
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (bispecific; aminophospholipid-specific antibodies, immunoconjugates
        and duramycin-based compds. for treating and diagnosing
        cancer and viral infections)
TT
     Diagnosis
        (cancer; aminophospholipid-specific antibodies,
        immunoconjugates and duramycin-based compds. for treating and
        diagnosing cancer and viral infections)
     Drug delivery systems
IT
        (carriers; aminophospholipid-specific antibodies, immunoconjugates and
        duramycin-based compds. for treating and diagnosing
        cancer and viral infections)
     Antibodies and Immunoglobulins
TT
     RL: BPN (Biosynthetic preparation); BSU (Biological study,
     unclassified); DGN (Diagnostic use); PRP (Properties); THU
     (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
        (chimeric; aminophospholipid-specific antibodies,
        immunoconjugates and duramycin-based compds. for treating and
        diagnosing cancer and viral infections)
IT
     Annexins
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (chimeric; aminophospholipid-specific antibodies, immunoconjugates and
        duramycin-based compds. for treating and diagnosing
```

```
cancer and viral infections)
     Imaging
TΤ
     X-ray
        (diagnostic; aminophospholipid-specific antibodies,
        immunoconjugates and duramycin-based compds. for treating and
        diagnosing cancer and viral infections)
     Toxins
IT
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (diphtheria; aminophospholipid-specific antibodies, immunoconjugates
        and duramycin-based compds. for treating and diagnosing
        cancer and viral infections)
IT
     Blood vessel
        (endothelium, tumor; aminophospholipid-specific antibodies,
        immunoconjugates and duramycin-based compds. for treating and
        diagnosing cancer and viral infections)
IT
     Immunoassay
        (enzyme-linked immunosorbent assay; aminophospholipid-specific
        antibodies, immunoconjugates and duramycin-based compds. for treating
        and diagnosing cancer and viral infections)
IT
     Toxins
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (exotoxins, Pseudomonas; aminophospholipid-specific antibodies,
        immunoconjugates and duramycin-based compds. for treating and
        diagnosing cancer and viral infections)
     Antibodies and Immunoglobulins
IT
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (fragments, Fv, Fab', Fab, diabody, linear antibody or F(ab'),
        CDR, univalent fragment; aminophospholipid-specific antibodies,
        immunoconjugates and duramycin-based compds. for treating and
        diagnosing cancer and viral infections)
     Antibodies and Immunoglobulins
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (heavy chain; aminophospholipid-specific
        antibodies, immunoconjugates and duramycin-based compds. for treating
        and diagnosing cancer and viral infections)
     Antibodies and Immunoglobulins
TT
     RL: BPN (Biosynthetic preparation); BSU (Biological study,
     unclassified); DGN (Diagnostic use); PRP (Properties); THU
     (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
        (humanized; aminophospholipid-specific antibodies,
        immunoconjugates and duramycin-based compds. for treating and
        diagnosing cancer and viral infections)
     Drug delivery systems
IT
        (immunoconjugates; aminophospholipid-specific antibodies,
        immunoconjugates and duramycin-based compds. for treating and
        diagnosing cancer and viral infections)
IT
     Diagnosis
        (immunodiagnosis; aminophospholipid-specific antibodies,
        immunoconjugates and duramycin-based compds. for treating and
        diagnosing cancer and viral infections)
IT
     Drug delivery systems
        (immunotoxins; aminophospholipid-specific antibodies, immunoconjugates
        and duramycin-based compds. for treating and diagnosing
        cancer and viral infections)
IT
     Cytomegalovirus
```

```
(infection; aminophospholipid-specific antibodies, immunoconjugates and
       duramycin-based compds. for treating and diagnosing
       cancer and viral infections)
IT
    Tubulins
    RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (inhibitors; aminophospholipid-specific antibodies, immunoconjugates
       and duramycin-based compds. for treating and diagnosing
       cancer and viral infections)
    Drug delivery systems
TT
        (injections, i.v.; aminophospholipid-specific antibodies,
        immunoconjugates and duramycin-based compds. for treating and
       diagnosing cancer and viral infections)
    Chemokines
IT
    RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (interferon γ-inducible protein-10, IP-10; aminophospholipid-
        specific antibodies, immunoconjugates and duramycin-based compds. for
       treating and diagnosing cancer and viral
        infections)
    NMR (nuclear magnetic resonance)
IT
        (isotopes; aminophospholipid-specific antibodies, immunoconjugates and
       duramycin-based compds. for treating and diagnosing
       cancer and viral infections)
    Antibodies and Immunoglobulins
IT
    RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
    DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (light chain; aminophospholipid-specific
        antibodies, immunoconjugates and duramycin-based compds. for treating
       and diagnosing cancer and viral infections)
    Antibodies and Immunoglobulins
IT
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
    DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (monoclonal, 3G4, (ATCC PTA 4545); aminophospholipid-specific
       antibodies, immunoconjugates and duramycin-based compds. for treating
        and diagnosing cancer and viral infections)
IT
     Antibodies and Immunoglobulins
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (monoclonal; aminophospholipid-specific antibodies, immunoconjugates
        and duramycin-based compds. for treating and diagnosing
        cancer and viral infections)
IT
     Fibronectins
     Laminins
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (peptides; aminophospholipid-specific antibodies, immunoconjugates and
        duramycin-based compds. for treating and diagnosing
        cancer and viral infections)
IT
     Toxins
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (plant-, fungus- or bacteria-derived; aminophospholipid-specific
        antibodies, immunoconjugates and duramycin-based compds. for treating
        and diagnosing cancer and viral infections)
IT
    Drug delivery systems
        (prodrugs; aminophospholipid-specific antibodies, immunoconjugates and
        duramycin-based compds. for treating and diagnosing
        cancer and viral infections)
```

Cytokines

IT

RL: BSU (Biological study, unclassified); BIOL (Biological study) (proinflammatory; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)

IT Bond

(releasable; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)

IT Diagnosis

(serodiagnosis; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)

IT Antibodies and Immunoglobulins

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
(Biological study); PREP (Preparation); USES (Uses)
(single chain, scFv; aminophospholipid-specific antibodies,
immunoconjugates and duramycin-based compds. for treating and
diagnosing cancer and viral infections)

IT Neoplasm

(solid; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)

IT Apoptosis

(tumor cell, inducing; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)

IT Endothelium

(vascular, tumor; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)

IT Alkaloids, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (vinca; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)

IT Infection

(viral; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)

IT Interferons

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (α; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)

IT Transforming growth factors

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (β1-; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)

IT Interferons

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (β; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)

IT Interferons

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (γ; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)

```
IT
    Enzymes, biological studies
    RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (D-Alanylcarboxypeptidase, antibody conjugates; aminophospholipid-
       specific antibodies, immunoconjugates and duramycin-based compds. for
       treating and diagnosing cancer and viral
       infections)
IT
    92769-12-5, Proliferin (protein)
    RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (-related protein; aminophospholipid-specific antibodies,
       immunoconjugates and duramycin-based compds. for treating and
       diagnosing cancer and viral infections)
    9002-62-4, Prolactin, biological studies
IT
    RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (16 kDa, fragment; aminophospholipid-specific antibodies,
       immunoconjugates and duramycin-based compds. for treating and
       diagnosing cancer and viral infections)
    790789-26-3DP, humanized or chimeric derivs. and conjugates
IT
    790789-28-5DP, humanized or chimeric derivs. and conjugates
    RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
    DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (amino acid sequence; aminophospholipid-specific antibodies,
       immunoconjugates and duramycin-based compds. for treating and
       diagnosing cancer and viral infections)
IT
    9035-58-9, Blood-coagulation factor III
    RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (aminophospholipid-specific antibodies, immunoconjugates and
       duramycin-based compds. for treating and diagnosing
       cancer and viral infections)
    54-42-2, Idoxuridine
                            70-00-8, Trifluorothymidine
IT
                                                          127-07-1, Hydroxyurea
    768-94-5, Amantadine
                            1391-36-2D, Duramycin, conjugates
                                                                2056-98-6
    3056-17-5, Stavudine
                           5536-17-4, Vidarabine
                                                    7481-89-2, Zalcitabine
    13392-28-4, Rimantadine
                               30516-87-1, AZT
                                                 36791-04-5, Ribavirin
    39809-25-1, Penciclovir
                               59277-89-3, Acyclovir
                                                       69655-05-6, Didanosine
    77181-69-2, Sorivudine
                              82410-32-0, Gancyclovir
                                                        113852-37-2, Cidofovir
    114977-28-5, Docetaxel
                                            127779-20-8, Saquinavir
                              120082-86-2
    129556-87-2, Adefovir diphosphate 129618-40-2, Nevirapine
                                                                   134678-17-4,
                                        136817-59-9, Delavirdine
                 136470-78-5, Abacavir
    Lamivudine
    139110-80-8, Zanamivir
                              142340-99-6, Adefovir dipivoxil
                                                                142937-65-3
    143188-53-8, Lamivudine triphosphate 145819-92-7, Emtricitabine
                   150378-17-9, Indinavir
    triphosphate
                                             154598-52-4, Efavirenz
    155213-67-5, Ritonavir
                              159989-64-7, Nelfinavir
                                                        161814-49-9, Amprenavir
    196618-13-0, Oseltamivir 717854-15-4, Mi 717854-16-5, Multinucleoside resistance B
                                717854-15-4, Multinucleoside resistance A
    RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (aminophospholipid-specific antibodies, immunoconjugates and
       duramycin-based compds. for treating and diagnosing
       cancer and viral infections)
                              50-18-0, Cyclophosphamide
                                                          50-35-1, Thalidomide
IT
    50-02-2, Dexamethasone
    50-76-0, Actinomycin D
                              51-21-8, Fluorouracil
                                                     53-06-5, Cortisone
                         55-86-7, Nitrogen mustard
                                                      57-22-7, Vincristine
    53-79-2, Puromycin
    59-05-2, Methotrexate
                             64-86-8, Colchicine
                                                  66-22-8, Uracil, biological
    studies
              66-81-9, Cycloheximide
                                        67-99-2, Aspergillin
                                                               145-63-1,
                                                           305-03-3,
    Suramin
              147-94-4, Cytarabine 148-82-3, Melphalan
    Chlorambucil
                   362-07-2
                               477-30-5, Colcemid 865-21-4, Vinblastine
    1404-00-8, Mitomycin
                           1406-72-0, Restrictocin 2998-57-4, Estramustine
    4375-07-9, Epipodophyllotoxin 7689-03-4, Camptothecin
                                                              9001-67-6D,
```

Neuraminidase, antibody conjugates 9001-78-9D, Alkaline phosphatase,

```
9001-99-4, Ribonuclease 9004-08-4D, Cathepsin,
antibody conjugates
antibody conjugates 9014-01-1D, Subtilisin, antibody conjugates
9014-06-6D, Penicillin amidase, antibody conjugates
                                                     9015-68-3,
                9016-17-5D, Arylsulfatase, antibody conjugates
L-Asparaginase
9025-05-2D, Cytosine deaminase, antibody conjugates
                                                     9031-11-2D,
β-Galactosidase, antibody conjugates 9031-98-5D, Carboxypeptidase,
                     9073-60-3D, antibody conjugates
                                                       9073-78-3D,
antibody conjugates
Thermolysin, antibody conjugates 10540-29-1, Tamoxifen 11056-06-7,
                                  17902-23-7, Tegafur
                                                         20830-81-3,
           15663-27-1, Cisplatin
                                        23110-15-8, Fumagillin
Daunorubicin
               21679-14-1, Fludarabine
23214-92-8, Doxorubicin
                        25316-40-9, Adriamycin
                                                  29767-20-2, Teniposide
31441-78-8, Mercaptopurine 33069-62-4, Paclitaxel
                                                     33419-42-0,
Etoposide 37270-94-3, Platelet factor 4
                                           56420-45-2, Epirubicin
62996-74-1, Staurosporine 65271-80-9, Mitoxantrone 65646-68-6,
Fenretinide
             70641-51-9, Edelfosine
                                      74578-38-4, UFT
                                                        75037-46-6,
         82855-09-2, Combretastatin 83150-76-9, Octreotide
84088-42-6, Linomide
                      86090-08-6, Angiostatin
                                               86243-64-3, αSarcin
95058-81-4, Gemcitabine
                        97682-44-5, Irinotecan
                                                  98319-26-7, Finasteride
112953-11-4, 7-Hydroxystaurosporine 123948-87-8, Topotecan
129298-91-5, AGM-1470
                      146426-40-6, Flavopiridol 156511-34-1, L 739749
160141-09-3, L-744832
                       187888-07-9, Endostatin
                                                188417-67-6, CM 101
(polysaccharide)
                  220127-57-1, STI571
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
   (aminophospholipid-specific antibodies, immunoconjugates and
  duramycin-based compds. for treating and diagnosing
  cancer and viral infections)
9034-40-6, LHRH
RL: BSU (Biological study, unclassified); BIOL (Biological study)
   (antagonists; aminophospholipid-specific antibodies, immunoconjugates
   and duramycin-based compds. for treating and diagnosing
  cancer and viral infections)
80449-01-0, Topoisomerase
                           105913-11-9, Plasminogen activator
124861-55-8, TIMP 2
                     140208-23-7
                                  140208-24-8, TIMP 1
145809-21-8, TIMP 3
                     186207-03-4, TIMP 4
RL: BSU (Biological study, unclassified); BIOL (Biological study)
   (inhibitors; aminophospholipid-specific antibodies, immunoconjugates
   and duramycin-based compds. for treating and diagnosing
  cancer and viral infections)
9068-38-6, Reverse transcriptase
                                  144114-21-6, HIV protease
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
   (inhibitors; aminophospholipid-specific antibodies, immunoconjugates
   and duramycin-based compds. for treating and diagnosing
  cancer and viral infections)
790789-25-2DP, humanized or chimeric derivs. and conjugates
790789-27-4DP, humanized or chimeric derivs. and conjugates
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
(Biological study); PREP (Preparation); USES (Uses)
   (nucleotide sequence; aminophospholipid-specific antibodies,
   immunoconjugates and duramycin-based compds. for treating and
  diagnosing cancer and viral infections)
790794-10-4
RL: PRP (Properties)
   (unclaimed nucleotide sequence; aminophospholipid-specific antibodies,
   immunoconjugates and duramycin-based compds. for treating and
  diagnosing cancer and viral infections)
790794-11-5
RL: PRP (Properties)
   (unclaimed protein sequence; aminophospholipid-
```

TT

IT

IT

IT

IT

IT

specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)

IT 650591-60-9 716329-62-3 790794-12-6

RL: PRP (Properties)

(unclaimed sequence; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)

L93 ANSWER 17 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:331679 CAPLUS

DOCUMENT NUMBER: 140:355832

TITLE: MAGE peptides binding to HLA class II molecules, T

cell receptors that bind complexes of the MAGE/HLA

peptides, and diagnostic and therapeutic uses

INVENTOR(S): Zhang, Yi; Chaux, Pascal; Boon-Falleur, Thierry; Van

Der Bruggen, Pierre

PATENT ASSIGNEE(S): Belg.

SOURCE: U.S. Pat. Appl. Publ., 59 pp., Cont.-in-part of U.S.

Ser. No. 860,840.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	- 			
US 2004077045	A1	20040422	US 2003-444683	20030523
US 2003049723	A1	20030313	US 2001-860840	20010518
PRIORITY APPLN. INFO.:			US 2001-860840	A2 20010518

ED Entered STN: 23 Apr 2004

The invention describes HLA class II binding peptides encoded by the MAGE tumor associated genes, such as MAGE-A3 gene, that are epitopes presented by HLA-DR1, as well as nucleic acids encoding such peptides and antibodies relating thereto. The peptides stimulate the activity and proliferation of CD4+ T lymphocytes. In addition, T cell receptors that bind complexes of the MAGE HLA class II peptides and HLA class II mols. have been isolated and sequenced. The invention provides isolated MAGE-A3 peptides which bind HLA class II mols., and functional variants of such peptides, comprising one or more amino acid addns., substitutions or deletions to the MAGE-A3 peptide sequence. Methods and products also are provided for diagnosing and treating conditions characterized by expression of MAGE genes.

IC ICM C07K014-74

ICS C07H021-04; C12P021-02; C12N005-06

INCL 435069100; 435320100; 435325000; 530350000; 536023500

CC 15-2 (Immunochemistry)

Section cross-reference(s): 3, 63

ST MAGE epitope HLA presented TCR binding antitumor antibody; cancer diagnosis MAGE peptide HLA complex; sequence MAGE peptide HLA T cell receptor

IT TCR (T cell receptors)

RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(CDR3 region; MAGE peptides binding to HLA class II mols., T cell receptors that bind complexes of MAGE/HLA peptides, and diagnostic and therapeutic uses)

IT Antigen-presenting cell

```
Antitumor agents
    CD4-positive T cell
    Drug delivery systems
    Drug screening
    Human
    Immunotherapy
    Linking agents
    Molecular cloning
    Plasmid vectors
    Retroviral vectors
    Tumor markers
    Vaccines
    Viral vectors
        (MAGE peptides binding to HLA class II mols., T cell receptors that
        bind complexes of MAGE/HLA peptides, and diagnostic and therapeutic
        uses)
    Diagnosis
IT
        (cancer; MAGE peptides binding to HLA class II mols., T cell
        receptors that bind complexes of MAGE/HLA peptides, and
        diagnostic and therapeutic uses)
    Antibodies and Immunoglobulins
IT
    RL: ARG (Analytical reagent use); DGN (Diagnostic use); THU
     (Therapeutic use); ANST (Analytical study); BIOL (Biological study);
    USES (Uses)
        (chimeric; MAGE peptides binding to HLA class II mols., T
        cell receptors that bind complexes of MAGE/HLA peptides, and diagnostic
        and therapeutic uses)
IT
    Antibodies and Immunoglobulins
    RL: ARG (Analytical reagent use); DGN (Diagnostic use); THU (Therapeutic
    use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
        (fragments, Fab, F(ab)2, Fv, CDR3; MAGE peptides binding to
        HLA class II mols., T cell receptors that bind complexes of MAGE/HLA
        peptides, and diagnostic and therapeutic uses)
IT
    Antibodies and Immunoglobulins
    RL: ARG (Analytical reagent use); DGN (Diagnostic use); THU
     (Therapeutic use); ANST (Analytical study); BIOL (Biological study);
    USES (Uses)
        (humanized; MAGE peptides binding to HLA class II mols., T
        cell receptors that bind complexes of MAGE/HLA peptides, and diagnostic
        and therapeutic uses)
IT
    TCR (T cell receptors)
    RL: ARG (Analytical reagent use); DGN (Diagnostic use); PRP (Properties);
    THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study);
    USES (Uses)
        (α subunit, CDR3 region; MAGE peptides binding to HLA
        class II mols., T cell receptors that bind complexes of MAGE/HLA
        peptides, and diagnostic and therapeutic uses)
     TCR (T cell receptors)
IT
    RL: ARG (Analytical reagent use); DGN (Diagnostic use); PRP (Properties);
    THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study);
     USES (Uses)
        (β subunit, CDR3 region; MAGE peptides binding to HLA
        class II mols., T cell receptors that bind complexes of MAGE/HLA
        peptides, and diagnostic and therapeutic uses)
                  681454-85-3
                                 681454-87-5
                                               681454-89-7
                                                             681454-91-1
IT
     681454-83-1
    RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic
     use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study);
     BIOL (Biological study); USES (Uses)
        (T cell receptor comprising CDR3; MAGE peptides binding to
        HLA class II mols., T cell receptors that bind complexes of MAGE/HLA
```

peptides, and diagnostic and therapeutic uses) 681454-81-9 TТ RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses) (T cell receptor fragment, comprising CDR3; MAGE peptides binding to HLA class II mols., T cell receptors that bind complexes of MAGE/HLA peptides, and diagnostic and therapeutic uses) L93 ANSWER 18 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN ACCESSION NUMBER: 2003:892820 CAPLUS DOCUMENT NUMBER: 139:380015 CDR-grafted mouse monoclonal anti-human CD22 TITLE: antibodies for diagnosis and treatment of lymphoma or non-Hodgkin's lymphoma Popplewell, Andrew George; Tickle, Simon Peter; INVENTOR(S): Ladyman, Heather Margaret PATENT ASSIGNEE(S): Celltech R & D Limited, UK PCT Int. Appl., 70 pp. SOURCE: CODEN: PIXXD2 Patent DOCUMENT TYPE: English LANGUAGE: FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION: PATENT NO. KIND DATE APPLICATION NO. DATE _ _ _ _ ______ _____ ______ -----WO 2003093320 A2 20031113 WO 2003-GB1934 20030502 WO 2003093320 **A**3 20040205 AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG CA 2484420 AΑ 20031113 CA 2003-2484420 20030502 AU 2003-223007 AU 2003223007 **A1** 20031117 20030502 US 2003-428408 US 2003235869 **A1** 20031225 20030502 EP 2003-718974 EP 1504035 20050209 A2 20030502 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK CN 1662558 Α 20050831 CN 2003-815043 20030502 JP 2004-501459 JP 2006506955 T2 20060302 20030502 NO 2004-4742 NO 2004004742 Α 20041222 20041102 PRIORITY APPLN. INFO.: A 20020502 GB 2002-10121 W 20030502 WO 2003-GB1934 ED Entered STN: 14 Nov 2003 There is disclosed antibody mols. containing at least one CDR derived from a ABmouse monoclonal antibody having specificity for human CD22. There is also disclosed a CDR grafted antibody wherein at least one of the CDRs is a modified CDR. Further disclosed are DNA sequences encoding the chains of the antibody mols., vectors, transformed host cells and uses of the antibody mols. in the treatment of diseases mediated by cells expressing CD22. ICM C07K016-28

ICS C12N015-13; C12N015-85; C12N005-10; A61K039-395; A61K031-7088;

A61P035-00 15-3 (Immunochemistry) CC Section cross-reference(s): 3, 9, 63 IT Affinity Antitumor agents DNA sequences Gene therapy Genetic vectors Human Immunotherapy Lymphoma Molecular cloning Mus Protein sequences Test kits (CDR-grafted mouse monoclonal anti-human CD22 antibodies for diagnosis and treatment of lymphoma or non-Hodgkin's lymphoma) ΤТ Diagnosis (cancer; CDR-grafted mouse monoclonal anti-human CD22 antibodies for diagnosis and treatment of lymphoma or non-Hodgkin's lymphoma) Antibodies and Immunoglobulins TT RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (heavy chain; CDR-grafted mouse monoclonal anti-human CD22 antibodies for diagnosis and treatment of lymphoma or non-Hodgkin's lymphoma) ТТ Antibodies and Immunoglobulins RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (humanized; CDR-grafted mouse monoclonal anti-human CD22 antibodies for diagnosis and treatment of lymphoma or non-Hodgkin's lymphoma) Antibodies and Immunoglobulins IT RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (light chain; CDR-grafted mouse monoclonal anti-human CD22 antibodies for diagnosis and treatment of lymphoma or non-Hodgkin's lymphoma) L93 ANSWER 19 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN ACCESSION NUMBER: 2003:242439 CAPLUS DOCUMENT NUMBER: 138:270296 Recombinant immunoglobulin having heavy and TITLE: light chain framework scaffold and donor antibody CDRs for diagnostic and therapeutic Zhang, Mei Yun; Schillberg, Stefan; Zimmermann, INVENTOR (S): Sabine; Di Fiore, Stefano; Emans, Neil; Fischer, Rainer PATENT ASSIGNEE(S): Fraunhofer Institut Molekularbiologie und Angewandte Oekologie, Germany SOURCE: PCT Int. Appl., 198 pp. CODEN: PIXXD2 DOCUMENT TYPE: Patent LANGUAGE: English

Page 68 04/17/2006 Searched by Alex Waclawiw

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

```
KIND
                               DATE
                                          APPLICATION NO.
                                                                 DATE
    PATENT NO.
                        ____
    WO 2003025124
                         A2
                                20030327
                                          WO 2002-US29003
                                                                  20020913
    WO 2003025124
                                20030918
                         A3
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
            PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
            UA, UG, US, UZ, VN, YU, ZA, ZM, ZW
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
            KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
            FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF,
            CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                20040707
                                          EP 2002-759649
    EP 1434800
                         A2
                                                                   20020913
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK
                                           US 2004-489328
    US 2005037420
                         A1
                                20050217
                                                                   20040827
                                            US 2001-318904P
                                                                P 20010914
PRIORITY APPLN. INFO.:
                                           WO 2002-US29003
                                                               W 20020913
ED
    Entered STN: 28 Mar 2003
    This invention relates to Ig mols. comprising light chain (VL) chimeric
AB
    variable domains, heavy chain (VH) chimeric variable domains, e.g., scFv
    antibodies that are expressed at high levels within a host cell,
    preferably within particular cellular compartments such as, e.g., cytosol
    or apoplast. The VL, VH and scFv antibody mols. comprise framework
    scaffolds of particularly preferred framework regions. This invention
    also relates to nucleic acid mols. encoding the Ig mols. of this
     invention, vectors expressing the Ig mols., hosts transformed with the
    nucleic acid mols. and vectors, and methods of using the Ig mols. Also
    described are Ig libraries as well as host cells, including transgenic
    plants, expressing the VL, VH or scFv antibody mols. of this invention.
    Thus, recombinant NSM protein was prepared to select antibody clones for
    mol. cloning of scFv's.
    ICM C12N
IC
     15-3 (Immunochemistry)
CC
     Section cross-reference(s): 3, 9, 11, 17
IT
        (-inducible promoter; plant cell-produced recombinant scFv antibodies
        comprising heavy and light chain framework scaffold
       with donor CDRs for diagnostic and therapeutic use)
IT
    Glutelins
    RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (1; promoter; plant cell-produced recombinant scFv antibodies
        comprising heavy and light chain framework scaffold
       with donor CDRs for diagnostic and therapeutic use)
IT
    Promoter (genetic element)
    RL: BSU (Biological study, unclassified); BUU (Biological use,
    unclassified); BIOL (Biological study); USES (Uses)
        (35S; plant cell-produced recombinant scFv antibodies comprising heavy
       and light chain framework scaffold with donor CDRs
       for diagnostic and therapeutic use)
    Cauliflower mosaic virus
IT
        (35s promoter; plant cell-produced recombinant scFv antibodies
       comprising heavy and light chain framework scaffold
       with donor CDRs for diagnostic and therapeutic use)
IT
    Proteins
```

```
RL: ARU (Analytical role, unclassified); BPN (Biosynthetic preparation);
     BSU (Biological study, unclassified); ANST (Analytical study); BIOL
     (Biological study); PREP (Preparation)
        (58,000-mol.-weight, NSM; plant cell-produced recombinant scFv antibodies
        comprising heavy and light chain framework scaffold
        with donor CDRs for diagnostic and therapeutic use)
     RL: ARU (Analytical role, unclassified); BSU (Biological study,
     unclassified); ANST (Analytical study); BIOL (Biological study)
        (58,000-mol.-weight, soluble; plant cell-produced recombinant scFv
        comprising heavy and light chain framework scaffold
        with donor CDRs for diagnostic and therapeutic use)
IT
     RL: ARU (Analytical role, unclassified); BPN (Biosynthetic preparation);
     BSU (Biological study, unclassified); ANST (Analytical study); BIOL
     (Biological study); PREP (Preparation)
        (59,000-mol.-weight, NSM; plant cell-produced recombinant scFv antibodies
        comprising heavy and light chain framework scaffold
        with donor CDRs for diagnostic and therapeutic use)
     RL: ARU (Analytical role, unclassified); BSU (Biological study,
     unclassified); ANST (Analytical study); BIOL (Biological study)
        (59,000-mol.-weight, soluble; plant cell-produced recombinant scFv
        comprising heavy and light chain framework scaffold
        with donor CDRs for diagnostic and therapeutic use)
IT
    RL: ARU (Analytical role, unclassified); BPN (Biosynthetic preparation);
     BSU (Biological study, unclassified); ANST (Analytical study); BIOL
     (Biological study); PREP (Preparation)
        (60,000-mol.-weight, NSM; plant cell-produced recombinant scFv antibodies
        comprising heavy and light chain framework scaffold
        with donor CDRs for diagnostic and therapeutic use)
IT
    Proteins
    RL: ARU (Analytical role, unclassified); BSU (Biological study,
    unclassified); ANST (Analytical study); BIOL (Biological study)
        (60,000-mol.-weight, soluble; plant cell-produced recombinant scFv
antibodies
        comprising heavy and light chain framework scaffold
        with donor CDRs for diagnostic and therapeutic use)
IT
     Proteins
    RL: ARU (Analytical role, unclassified); BPN (Biosynthetic preparation);
    BSU (Biological study, unclassified); ANST (Analytical study); BIOL
     (Biological study); PREP (Preparation)
        (6000-mol.-weight, NSM; plant cell-produced recombinant scFv antibodies
        comprising heavy and light chain framework scaffold
        with donor CDRs for diagnostic and therapeutic use)
IT
    Proteins
    RL: ARU (Analytical role, unclassified); BSU (Biological study,
    unclassified); ANST (Analytical study); BIOL (Biological study)
        (6000-mol.-weight, soluble; plant cell-produced recombinant scFv antibodies
        comprising heavy and light chain framework scaffold
        with donor CDRs for diagnostic and therapeutic use)
IT
    Proteins
    RL: ARU (Analytical role, unclassified); BPN (Biosynthetic preparation);
    BSU (Biological study, unclassified); ANST (Analytical study); BIOL
     (Biological study); PREP (Preparation)
        (62,000-mol.-weight, NSM; plant cell-produced recombinant scFv antibodies
        comprising heavy and light chain framework scaffold
```

```
with donor CDRs for diagnostic and therapeutic use)
    Proteins
ΤТ
     RL: ARU (Analytical role, unclassified); BSU (Biological study,
     unclassified); ANST (Analytical study); BIOL (Biological study)
        (62,000-mol.-weight, soluble; plant cell-produced recombinant scFv
antibodies
        comprising heavy and light chain framework scaffold
        with donor CDRs for diagnostic and therapeutic use)
IT
     RL: ARU (Analytical role, unclassified); BPN (Biosynthetic preparation);
     BSU (Biological study, unclassified); ANST (Analytical study); BIOL
     (Biological study); PREP (Preparation)
        (63,000-mol.-weight, NSM; plant cell-produced recombinant scFv antibodies
        comprising heavy and light chain framework scaffold
        with donor CDRs for diagnostic and therapeutic use)
IT
     Proteins
     RL: ARU (Analytical role, unclassified); BSU (Biological study,
     unclassified); ANST (Analytical study); BIOL (Biological study)
        (63,000-mol.-weight, soluble; plant cell-produced recombinant scFv
antibodies
        comprising heavy and light chain framework scaffold
        with donor CDRs for diagnostic and therapeutic use)
TΤ
     Proteins
     RL: ARU (Analytical role, unclassified); BPN (Biosynthetic preparation);
     BSU (Biological study, unclassified); ANST (Analytical study); BIOL
     (Biological study); PREP (Preparation)
        (64,000-mol.-weight, NSM; plant cell-produced recombinant scFv antibodies
        comprising heavy and light chain framework scaffold
        with donor CDRs for diagnostic and therapeutic use)
     Proteins
TΤ
     RL: ARU (Analytical role, unclassified); BSU (Biological study,
     unclassified); ANST (Analytical study); BIOL (Biological study)
        (64,000-mol.-weight, soluble; plant cell-produced recombinant scFv
antibodies
        comprising heavy and light chain framework scaffold
        with donor CDRs for diagnostic and therapeutic use)
     Proteins
IT
     RL: ARU (Analytical role, unclassified); BPN (Biosynthetic preparation);
     BSU (Biological study, unclassified); ANST (Analytical study); BIOL
     (Biological study); PREP (Preparation)
        (65,000-mol.-weight, NSM; plant cell-produced recombinant scFv antibodies
        comprising heavy and light chain framework scaffold
        with donor CDRs for diagnostic and therapeutic use)
     Proteins
     RL: ARU (Analytical role, unclassified); BSU (Biological study,
     unclassified); ANST (Analytical study); BIOL (Biological study)
        (65,000-mol.-weight, soluble; plant cell-produced recombinant scFv
antibodies
        comprising heavy and light chain framework scaffold
        with donor CDRs for diagnostic and therapeutic use)
IT
     Proteins
     RL: ARU (Analytical role, unclassified); BPN (Biosynthetic preparation);
     BSU (Biological study, unclassified); ANST (Analytical study); BIOL
     (Biological study); PREP (Preparation)
        (66,000-mol.-weight, NSM; plant cell-produced recombinant scFv antibodies
        comprising heavy and light chain framework scaffold
        with donor CDRs for diagnostic and therapeutic use)
     Proteins
IT
     RL: ARU (Analytical role, unclassified); BSU (Biological study,
     unclassified); ANST (Analytical study); BIOL (Biological study)
```

```
(66,000-mol.-weight, soluble; plant cell-produced recombinant scFv
antibodies
        comprising heavy and light chain framework scaffold
        with donor CDRs for diagnostic and therapeutic use)
     RL: ARU (Analytical role, unclassified); BPN (Biosynthetic preparation);
     BSU (Biological study, unclassified); ANST (Analytical study); BIOL
     (Biological study); PREP (Preparation)
        (67,000-mol.-weight, NSM; plant cell-produced recombinant scFv antibodies
        comprising heavy and light chain framework scaffold
        with donor CDRs for diagnostic and therapeutic use)
IT
     Proteins
     RL: ARU (Analytical role, unclassified); BSU (Biological study,
     unclassified); ANST (Analytical study); BIOL (Biological study)
        (67,000-mol.-weight, soluble; plant cell-produced recombinant scFv
antibodies
        comprising heavy and light chain framework scaffold
        with donor CDRs for diagnostic and therapeutic use)
IT
     Proteins
     RL: ARU (Analytical role, unclassified); BPN (Biosynthetic preparation);
     BSU (Biological study, unclassified); ANST (Analytical study); BIOL
     (Biological study); PREP (Preparation)
        (68,000-mol.-weight, NSM; plant cell-produced recombinant scFv antibodies
        comprising heavy and light chain framework scaffold
        with donor CDRs for diagnostic and therapeutic use)
IT
     Proteins
     RL: ARU (Analytical role, unclassified); BSU (Biological study,
     unclassified); ANST (Analytical study); BIOL (Biological study)
        (68,000-mol.-weight, soluble; plant cell-produced recombinant scFv
antibodies
        comprising heavy and light chain framework scaffold
        with donor CDRs for diagnostic and therapeutic use)
     Proteins
IT
    RL: ARU (Analytical role, unclassified); BPN (Biosynthetic preparation);
    BSU (Biological study, unclassified); ANST (Analytical study); BIOL
     (Biological study); PREP (Preparation)
        (70,000-mol.-weight, NSM; plant cell-produced recombinant scFv antibodies
        comprising heavy and light chain framework scaffold
        with donor CDRs for diagnostic and therapeutic use)
TТ
     Proteins
     RL: ARU (Analytical role, unclassified); BSU (Biological study,
     unclassified); ANST (Analytical study); BIOL (Biological study)
        (70,000-mol.-weight, soluble; plant cell-produced recombinant scFv
antibodies
        comprising heavy and light chain framework scaffold
        with donor CDRs for diagnostic and therapeutic use)
    Animal cell line
IT
        (CHO; plant cell-produced recombinant scFv antibodies comprising heavy
        and light chain framework scaffold with donor CDRs
        for diagnostic and therapeutic use)
IT
    Animal cell line
        (COS; plant cell-produced recombinant scFv antibodies comprising heavy
        and light chain framework scaffold with donor CDRs
        for diagnostic and therapeutic use)
TΤ
     Protein motifs
        (Ig. heavy and light chain CDRs; plant
        cell-produced recombinant scFv antibodies comprising heavy and
        light chain framework scaffold with donor CDRs for
        diagnostic and therapeutic use)
     Protein motifs
IT
```

```
(Ig. heavy and light chain framework; plant
        cell-produced recombinant scFv antibodies comprising heavy and
        light chain framework scaffold with donor CDRs for
        diagnostic and therapeutic use)
ΙT
     Fusion proteins (chimeric proteins)
     Proteins
     RL: ARU (Analytical role, unclassified); BPN (Biosynthetic preparation);
     BSU (Biological study, unclassified); ANST (Analytical study); BIOL
     (Biological study); PREP (Preparation)
        (NSM; plant cell-produced recombinant scFv antibodies comprising heavy
        and light chain framework scaffold with donor CDRs
        for diagnostic and therapeutic use)
IT
     Promoter (genetic element)
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (SbPRP1; plant cell-produced recombinant scFv antibodies comprising
        heavy and light chain framework scaffold with donor
        CDRs for diagnostic and therapeutic use)
IT
     Diagnosis
        (agents; plant cell-produced recombinant scFv antibodies comprising
        heavy and light chain framework scaffold with donor
        CDRs for diagnostic and therapeutic use)
IT
     Plant tissue
        (apoplast; plant cell-produced recombinant scFv antibodies comprising
        heavy and light chain framework scaffold with donor
        CDRs for diagnostic and therapeutic use)
IT
     Peptides, biological studies
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (cellular-targeting; plant cell-produced recombinant scFv antibodies comprising heavy and light chain framework scaffold
        with donor CDRs for diagnostic and therapeutic use)
IT
     Cytoplasm
        (cytoplast; plant cell-produced recombinant scFv antibodies comprising
        heavy and light chain framework scaffold with donor
        CDRs for diagnostic and therapeutic use)
IT
     Cytoplasm
        (cytosol; plant cell-produced recombinant scFv antibodies comprising
        heavy and light chain framework scaffold with donor
        CDRs for diagnostic and therapeutic use)
IT
     Immunoassay
        (enzyme-linked immunosorbent assay, indirect or capture phage; plant
        cell-produced recombinant scFv antibodies comprising heavy and
        light chain framework scaffold with donor CDRs for
        diagnostic and therapeutic use)
ΙT
     Immunoassay
        (enzyme-linked immunosorbent assay; plant cell-produced recombinant
        scFv antibodies comprising heavy and light chain
        framework scaffold with donor CDRs for diagnostic and therapeutic use)
     Antibodies and Immunoglobulins
IT
     RL: BPN (Biosynthetic preparation); BSU (Biological study,
     unclassified); DGN (Diagnostic use); PRP (Properties); THU
     (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
        (fragments, Fv and scFv; plant cell-produced recombinant scFv
        antibodies comprising heavy and light chain
        framework scaffold with donor CDRs for diagnostic and
        therapeutic use)
     Antibodies and Immunoglobulins
IT
     RL: BPN (Biosynthetic preparation); BSU (Biological study,
```

```
unclassified); DGN (Diagnostic use); THU (Therapeutic
    use); BIOL (Biological study); PREP (Preparation);
    USES (Uses)
        (fusion products, diabodies, triabodies and tetrabodies; plant
        cell-produced recombinant scFv antibodies comprising heavy
        and light chain framework scaffold with donor
        CDRs for diagnostic and therapeutic use)
TT
    Promoter (genetic element)
    RL: BSU (Biological study, unclassified); BUU (Biological use,
    unclassified); BIOL (Biological study); USES (Uses)
        (heat shock-inducible; plant cell-produced recombinant scFv antibodies
        comprising heavy and light chain framework scaffold
        with donor CDRs for diagnostic and therapeutic use)
    Antibodies and Immunoglobulins
ΤТ
    RL: BPN (Biosynthetic preparation); BSU (Biological study,
    unclassified); DGN (Diagnostic use); PRP (Properties); THU
     (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
        (heavy chain; plant cell-produced
        recombinant scFv antibodies comprising heavy and light
        chain framework scaffold with donor CDRs for
        diagnostic and therapeutic use)
IT
    Diagnosis
        (immunodiagnosis; plant cell-produced recombinant scFv antibodies
        comprising heavy and light chain framework scaffold
        with donor CDRs for diagnostic and therapeutic use)
TT
    Auxins
    RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (inducible promoter; plant cell-produced recombinant scFv antibodies
        comprising heavy and light chain framework scaffold
       with donor CDRs for diagnostic and therapeutic use)
TΤ
    Antibodies and Immunoglobulins
    RL: BPN (Biosynthetic preparation); BSU (Biological study,
    unclassified); DGN (Diagnostic use); PRP (Properties); THU
     (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
        (light chain; plant cell-produced
        recombinant scFv antibodies comprising heavy and light
       chain framework scaffold with donor CDRs for
        diagnostic and therapeutic use)
ΙT
    Animal cell
        (mammalian; plant cell-produced recombinant scFv antibodies comprising
       heavy and light chain framework scaffold with donor
       CDRs for diagnostic and therapeutic use)
IT
    Embryophyta
        (ornamental plant; plant cell-produced recombinant scFv antibodies
        comprising heavy and light chain framework scaffold
       with donor CDRs for diagnostic and therapeutic use)
IT
    Bioassay
        (phage display; plant cell-produced recombinant scFv antibodies
        comprising heavy and light chain framework scaffold
       with donor CDRs for diagnostic and therapeutic use)
ΙT
    Alqae
    Amaranthus
    Avena sativa
    Aves
    Camelidae
    Canola
      DNA sequences
    Drugs
```

```
Escherichia coli
Eubacteria
Eukaryota
Fish
Fungi
Genetic vectors
Genomic library
Glycine max
Gossypium hirsutum
Helianthus annuus
Hordeum vulgare
Human
Insecta
Liliopsida
Linking agents
Lycopersicon esculentum
Magnoliopsida
Mammalia
Medicago sativa
Molecular cloning
Mycoplasma
Nematoda
Nicotiana tabacum
Oryza sativa
Pathogen
Phage display library
Plant cell
Prokaryota
Protein microarray technology
Protein sequences
Rodentia
Saccharum officinarum
Solanum tuberosum
Sorghum bicolor
Transformation, genetic
Triticum aestivum
Virus
Yeast
Zea mays
   (plant cell-produced recombinant scFv antibodies comprising heavy and
   light chain framework scaffold with donor CDRs for
   diagnostic and therapeutic use)
Antibodies and Immunoglobulins
  Antibodies and Immunoglobulins
  Nucleic acids
RL: BPN (Biosynthetic preparation); BSU (Biological study,
unclassified); DGN (Diagnostic use); PRP (Properties); THU
(Therapeutic use); BIOL (Biological study); PREP
(Preparation); USES (Uses)
   (plant cell-produced recombinant scFv antibodies comprising
   heavy and light chain framework scaffold with donor
   CDRs for diagnostic and therapeutic use)
Antigens
RL: BSU (Biological study, unclassified); BIOL (Biological study)
   (plant cell-produced recombinant scFv antibodies comprising heavy and
   light chain framework scaffold with donor CDRs for
   diagnostic and therapeutic use)
Promoter (genetic element)
RL: BSU (Biological study, unclassified); BUU (Biological use,
unclassified); BIOL (Biological study); USES (Uses)
```

IT

IT

IT

```
(plant cell-produced recombinant scFv antibodies comprising heavy and
        light chain framework scaffold with donor CDRs for
       diagnostic and therapeutic use)
    Organelle
IT
        (protein body, targeting peptide; plant cell-produced recombinant scFv
       antibodies comprising heavy and light chain
        framework scaffold with donor CDRs for diagnostic and therapeutic use)
     Proteins
IT
    RL: ARU (Analytical role, unclassified); BPN (Biosynthetic preparation);
    BSU (Biological study, unclassified); ANST (Analytical study); BIOL
     (Biological study); PREP (Preparation)
        (recombinant, NSM; plant cell-produced recombinant scFv antibodies
        comprising heavy and light chain framework scaffold
       with donor CDRs for diagnostic and therapeutic use)
IT
     Proteins
    RL: ARU (Analytical role, unclassified); BSU (Biological study,
    unclassified); ANST (Analytical study); BIOL (Biological study)
        (soluble; plant cell-produced recombinant scFv antibodies comprising heavy
       and light chain framework scaffold with donor CDRs
        for diagnostic and therapeutic use)
TT
    Leaf
    Plant tissue
    Root
        (specific promoter; plant cell-produced recombinant scFv antibodies
        comprising heavy and light chain framework scaffold
       with donor CDRs for diagnostic and therapeutic use)
IT
    Endoplasmic reticulum
        (targeting peptide; plant cell-produced recombinant scFv antibodies
       comprising heavy and light chain framework scaffold
       with donor CDRs for diagnostic and therapeutic use)
IT
    Embryophyta
     Plants
        (transgenic; plant cell-produced recombinant scFv antibodies comprising
       heavy and light chain framework scaffold with donor
       CDRs for diagnostic and therapeutic use)
     Imaging
TT
        (tumor; plant cell-produced recombinant scFv antibodies comprising
       heavy and light chain framework scaffold with donor
       CDRs for diagnostic and therapeutic use)
    Organelle
IT
        (vacuole, targeting peptide; plant cell-produced recombinant scFv
       antibodies comprising heavy and light chain
       framework scaffold with donor CDRs for diagnostic and therapeutic use)
    Promoter (genetic element)
IT
    RL: BSU (Biological study, unclassified); BUU (Biological use,
    unclassified); BIOL (Biological study); USES (Uses)
        (wounding-inducible; plant cell-produced recombinant scFv antibodies
       comprising heavy and light chain framework scaffold
       with donor CDRs for diagnostic and therapeutic use)
IT
    Tubulins
    RL: BSU (Biological study, unclassified); BUU (Biological use,
    unclassified); BIOL (Biological study); USES (Uses)
        (α-, promoter; plant cell-produced recombinant scFv antibodies
       comprising heavy and light chain framework scaffold
       with donor CDRs for diagnostic and therapeutic use)
IT
    503333-47-9P
                    503334-70-1P
                                   503334-73-4P
                                                  503334-74-5P
                                                                 503334-75-6P
                    503334-77-8P
                                   503334-78-9P
    503334-76-7P
                                                  503334-79-0P
                                                                 503334-80-3P
                    503334-82-5P
                                   503334-83-6P
                                                  503334-84-7P
    503334-81-4P
                                                                 503334-85-8P
    503334-86-9P
                  503334-87-0P
    RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
```

```
DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (amino acid sequence; plant cell-produced recombinant scFv antibodies
        comprising heavy and light chain framework scaffold
        with donor CDRs for diagnostic and therapeutic use)
     503334-71-2P
                    503334-72-3P
                                   503334-88-1P
IT
    RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
    DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (nucleotide sequence; plant cell-produced recombinant scFv antibodies
        comprising heavy and light chain framework scaffold
        with donor CDRs for diagnostic and therapeutic use)
     178327-47-4P
                    503309-56-6P
                                   503309-59-9P
                                                  503309-61-3P
                                                                  503309-62-4P
IT
     503309-64-6P
                    503309-66-8P
                                   503333-48-0P
                                                  503333-49-1P
                                                                  503333-50-4P
     503333-51-5P
                    503333-52-6P
                                   503333-53-7P
                                                  503333-54-8P
                                                                  503333-55-9P
     503333-56-0P, 35: PN: WO03025124 SEQID: 35 claimed DNA
    RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
    DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (plant cell-produced recombinant scFv antibodies comprising heavy and
        light chain framework scaffold with donor CDRs for
        diagnostic and therapeutic use)
IT
     60267-61-0, Ubiquitin
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (promoter; plant cell-produced recombinant scFv antibodies comprising
        heavy and light chain framework scaffold with donor
        CDRs for diagnostic and therapeutic use)
                                               503337-03-9
                                                              503337-04-0
IT
     503337-00-6
                   503337-01-7
                                 503337-02-8
     503337-05-1
                   503337-06-2
                                 503337-07-3
                                               503337-08-4
                                                              503337-09-5
                                                              503337-14-2
     503337-10-8
                   503337-11-9
                                 503337-12-0
                                               503337-13-1
     503337-15-3
                   503337-16-4
                                 503337-17-5
                                               503337-18-6
                                                              503337-19-7
     503337-20-0
                   503337-21-1
                                 503337-22-2
                                               503337-23-3
                                                              503337-24-4
     503337-25-5
                   503337-26-6
                                 503337-27-7
                                               503337-28-8
                                                              503337-29-9
     503337-30-2
                   503337-31-3
                                 503337-32-4
                                               503337-33-5
                                                              503337-34-6
     503337-35-7
                   503337-36-8
                                 503337-37-9
                                               503337-38-0
                                                              503337-39-1
     503337-40-4
                   503337-41-5
                                 503337-42-6
                                               503337-43-7
                                                              503337-44-8
                                               503337-48-2
     503337-45-9
                   503337-46-0
                                 503337-47-1
     RL: PRP (Properties)
        (unclaimed nucleotide sequence; recombinant Ig having heavy and
        light chain framework scaffold and donor antibody
        CDRs for diagnostic and therapeutic assay)
IT
     503337-49-3
     RL: PRP (Properties)
        (unclaimed protein sequence; recombinant Ig having heavy and
        light chain framework scaffold and donor antibody
        CDRs for diagnostic and therapeutic assay)
L93 ANSWER 20 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                         2003:154547 CAPLUS
DOCUMENT NUMBER:
                         138:203682
TITLE:
                         Humanized mouse anti-\beta amyloid antibodies for
                         treating Alzheimer's disease, Down's syndrome,
                         cerebral amyloid angiopathy, mild cognitive
                         impairment, and the like
                         Jia, Audrey Yunhua; Tsurushita, Naoya; Vasquez,
INVENTOR(S):
                         Maximiliano J.
PATENT ASSIGNEE(S):
                         Eli Lilly and Company, USA
SOURCE:
                         PCT Int. Appl., 82 pp.
                         CODEN: PIXXD2
```

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

```
APPLICATION NO.
                      KIND DATE
                                                               DATE
    PATENT NO.
    _____
                        _ - - -
                              -----
                                          ______
                                          WO 2002-US21322
                                                                20020814
                              20030227
    WO 2003016466
                        A2
    WO 2003016466
                              20031023
                        A3
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
            PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
            UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
            KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
            FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF,
            CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                              20030227
                                        CA 2002-2451998
                                                                20020814
                        AA
    CA 2451998
                              20040630
                                        EP 2002-759113
                                                                20020814
                        A2
    EP 1432444
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK
                              20050210
                                         JP 2003-521775
                                                                20020814
    JP 2005503789
                        T2
                              20040930
                                          US 2004-487322
                                                                20040217
    US 2004192898
                         A1
                                          US 2001-313224P
                                                             P 20010817
PRIORITY APPLN. INFO.:
                                          WO 2002-US21322
                                                             W 20020814
```

ED Entered STN: 28 Feb 2003

- AB This invention provides variant 266 antibodies that are engineered to lack an N-glycosylation site within the CDR2 of the heavy chain, pharmaceutical compns. thereof, and polynucleotide sequences, vectors, and transformed cells useful to express the variant antibodies. The variants sequester soluble Aβ peptide from humanbiol. fluids and specifically bind an epitope contained within position 13-28 of the amyloid beta peptide Aβ with significantly greater affinity than either mouse antibody 266 or humanized 266 antibodies retaining N-glycosylation sites. The variant antibodies are useful for treatment or prevention of conditions and diseases associated with Asz, including Alzheimer's disease, Down's syndrome, cerebral amyloid angiopathy, mild cognitive impairment, and the like.
- IC ICM C12N
- CC 15-3 (Immunochemistry)

Section cross-reference(s): 3

IT Antibodies and Immunoglobulins

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(IgG1; humanized mouse anti- β amyloid antibodies for treating Alzheimer's disease, Down's syndrome, cerebral amyloid angiopathy, mild cognitive impairment, and the like)

IT Antibodies and Immunoglobulins

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(fragments; humanized mouse anti- β amyloid antibodies for treating Alzheimer's disease, Down's syndrome, cerebral amyloid angiopathy, mild cognitive impairment, and the like)

IT Antibodies and Immunoglobulins

```
RL: BPN (Biosynthetic preparation); BSU (Biological study,
    unclassified); DGN (Diagnostic use); PRP (Properties); THU
     (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
        (fusion products; humanized mouse anti-β amyloid
        antibodies for treating Alzheimer's disease, Down's syndrome, cerebral
        amyloid angiopathy, mild cognitive impairment, and the like)
TT
    Protein motifs
        (qlycosylation site, N-; CDR2; humanized mouse anti-β
        amyloid antibodies for treating Alzheimer's disease, Down's syndrome,
        cerebral amyloid angiopathy, mild cognitive impairment, and the like)
    Antibodies and Immunoglobulins
IT
    RL: BPN (Biosynthetic preparation); BSU (Biological study,
     unclassified); DGN (Diagnostic use); PRP (Properties); THU
     (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
        (heavy chain; humanized mouse anti-β
        amyloid antibodies for treating Alzheimer's disease, Down's syndrome,
        cerebral amyloid angiopathy, mild cognitive impairment, and the like)
IT
    Alzheimer's disease
    Body fluid
      DNA sequences
    Down's syndrome
    Drug delivery systems
    Genetic vectors
    HeLa cell
    Human
     Immunotherapy
    Molecular cloning
    Mus
    Protein sequences
       cDNA sequences
        (humanized mouse anti-\beta amyloid antibodies for treating
       Alzheimer's disease, Down's syndrome, cerebral amyloid angiopathy, mild
        cognitive impairment, and the like)
IT
    Antibodies and Immunoglobulins
    RL: BPN (Biosynthetic preparation); BSU (Biological study,
    unclassified); DGN (Diagnostic use); PRP (Properties); THU
     (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
        (humanized mouse anti-\beta amyloid antibodies for treating
       Alzheimer's disease, Down's syndrome, cerebral amyloid angiopathy, mild
        cognitive impairment, and the like)
IT
    Nucleic acids
    RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
    DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
        (humanized mouse anti-β amyloid antibodies for treating
       Alzheimer's disease, Down's syndrome, cerebral amyloid angiopathy, mild
        cognitive impairment, and the like)
    Antibodies and Immunoglobulins
    RL: BPN (Biosynthetic preparation); BSU (Biological study,
    unclassified); DGN (Diagnostic use); PRP (Properties); THU
     (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
        (humanized; humanized mouse anti-β amyloid
       antibodies for treating Alzheimer's disease, Down's syndrome, cerebral
       amyloid angiopathy, mild cognitive impairment, and the like)
    Antibodies and Immunoglobulins
    RL: BPN (Biosynthetic preparation); BSU (Biological study,
```

unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(light chain; humanized mouse anti-β

amyloid antibodies for treating Alzheimer's disease, Down's syndrome, cerebral amyloid angiopathy, mild cognitive impairment, and the like)

IT Antibodies and Immunoglobulins

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(monoclonal; humanized mouse anti-β amyloid antibodies for treating Alzheimer's disease, Down's syndrome, cerebral amyloid angiopathy, mild cognitive impairment, and the like)

L93 ANSWER 21 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:396486 CAPLUS

DOCUMENT NUMBER: 138:400408

Humanized antibodies LB-00503 and LB-00506 specific TITLE:

for human 4-1BB and pharmaceutical compositions

comprising said humanized antibodies

Hong, Hyo Jeong; Park, Sung Sup; Kang, Young Jun; INVENTOR(S):

Kang, Chang-Yuil; Yoon, Sung Kwan; Park, Youngwoo; Yoon, Hyesung; Jang, Hyunsook; Rha, Geun Bae; Yoo, Jin-San; Jeong, Jong Keun; Shim, Dong Sup; Park,

Mijeong; Kim, Hwadong; Park, Jung-gyu; Yang, Jae-young

PATENT ASSIGNEE(S): S. Korea

SOURCE: U.S. Pat. Appl. Publ., 34 pp., Cont.-in-part of U.S.

> 6,458,934. CODEN: USXXCO

DOCUMENT TYPE: Patent English LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATĒ		
US 2003096976	A1	20030522	US 2002-233996		20020904		
KR 2000034847	Α	20000626	KR 1999-16750		19990511		
US 6458934	B1	20021001	US 1999-438954		19991112		
PRIORITY APPLN. INFO.:			KR 1998-49177	Α	19981117		
			KR 1999-16750	A	19990511		
			US 1999-438954	A2	19991112		
			KR 1998-19177	Α	19981117		

Entered STN: 23 May 2003 ED

The present invention relates to humanized monoclonal antibodies LB-00503 AB and LB-00506, which are specific for human 4-1BB mols., have high binding affinities and can bind efficiently with activated T cells expressing the 4-1BB mol., as well as pharmaceutical compns. Particularly, the present invention provides said humanized antibody LB-00503, which is modified from the humanized antibody Hz4B4-2 and substitutes the 61st amino acid, serine by asparagine in the amino acid residues of 59th61st and said humanized antibody LB-00506, which enhances the antibody binding affinity of said humanized antibody LB-00503 in which 2 amino acid residues of the right border in the antibody binding site CDR2 of the heavy chain variable region are substituted from glutamine→glycine $(Q\rightarrow G)$ to lysine \rightarrow serine $(K\rightarrow S)$.

ICM A61K039-395

ICS C12N005-06; C07K016-44

INCL 530388150; 424141100; 435328000; 435320100

```
CC
    15-3 (Immunochemistry)
     Section cross-reference(s): 3, 9, 63
    Antibodies and Immunoglobulins
IT
     RL: BPN (Biosynthetic preparation); BSU (Biological study,
     unclassified); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (fragments; humanized antibodies LB-00503 and LB-00506
        specific for human 4-1BB and pharmaceutical compns. comprising said
        humanized antibodies)
    Antibodies and Immunoglobulins
     RL: BPN (Biosynthetic preparation); BSU (Biological study,
     unclassified); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (fusion products; humanized antibodies LB-00503 and LB-00506
        specific for human 4-1BB and pharmaceutical compns. comprising said
        humanized antibodies)
     Antibodies and Immunoglobulins
IT
     RL: BPN (Biosynthetic preparation); BSU (Biological study,
     unclassified); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (heavy chain; humanized antibodies
        LB-00503 and LB-00506 specific for human 4-1BB and pharmaceutical
        compns. comprising said humanized antibodies)
     Animal cell line
TT
     Autoimmune disease
     CD4-positive T cell
     CD8-positive T cell
       DNA sequences
     Dissociation constant
     Drug delivery systems
     Genetic vectors
     Human
     Immunosuppressants
     Molecular cloning
     Protein sequences
     Rheumatoid arthritis
     Transplant and Transplantation
     Transplant rejection
        (humanized antibodies LB-00503 and LB-00506 specific for human 4-1BB
        and pharmaceutical compns. comprising said humanized antibodies)
     Antibodies and Immunoglobulins
     RL: BPN (Biosynthetic preparation); BSU (Biological study,
     unclassified); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (humanized antibodies LB-00503 and LB-00506 specific for
        human 4-1BB and pharmaceutical compns. comprising said
        humanized antibodies)
     Antibodies and Immunoglobulins
     RL: BPN (Biosynthetic preparation); BSU (Biological study,
     unclassified); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (humanized; humanized antibodies LB-00503 and
        LB-00506 specific for human 4-1BB and pharmaceutical compns. comprising
        said humanized antibodies)
     Antibodies and Immunoglobulins
     RL: BPN (Biosynthetic preparation); BSU (Biological study,
     unclassified); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (light chain; humanized antibodies
        LB-00503 and LB-00506 specific for human 4-1BB and pharmaceutical
```

compns. comprising said humanized antibodies)

IT Antibodies and Immunoglobulins

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL

(Biological study); PREP (Preparation); USES (Uses)

(monoclonal; humanized antibodies LB-00503 and LB-00506 specific for human 4-1BB and pharmaceutical compns. comprising said humanized antibodies)

L93 ANSWER 22 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2003:241908 CAPLUS

DOCUMENT NUMBER:

138:270278

TITLE:

Vectors and site-specific recombination for

generating single-chain antibodies to intracellular

antigens

INVENTOR(S):

Li, Shengfeng

PATENT ASSIGNEE(S):

USA

SOURCE:

CODEN: USXXCO

DOCUMENT TYPE: Patent English LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
US 2003059888	A1	20030327	US 2002-226950	20020822		
PRIORITY APPLN. INFO.:			US 2001-314478P P	20010822		

U.S. Pat. Appl. Publ., 20 pp.

Entered STN: 28 Mar 2003

The present invention provides vectors that encode single-chain AB antigen-binding units in both prokaryotic and eukaryotic cells. vectors are particularly useful for generating a diverse repertoire of single-chain antibodies to facilitate an in vivo screening for binding to a desired antigen inside a cell. Diversification of the antibody repertoire is afforded by site-specific recombination and Ig chain shuffling between vectors within the host. Cognate antigen recognition and screening utilizes the two-hybrid methodol.

IC ICM C12P021-02

ICS C12N001-21; C12N015-74; C12N015-85; C12N005-06

INCL 435069100; 435326000; 435455000; 435472000; 435252300; 435320100

15-1 (Immunochemistry)

Section cross-reference(s): 3

IT Enzymes, biological studies

> RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(DNA-recombining, cre; for shuffling of Ig variable region fragments and generation of single-chain antibody repertoire)

Enzymes, biological studies IT

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(DNA-recombining, gene FLP; for shuffling of Iq variable region fragments and generation of single-chain antibody repertoire)

Transcription factors TΤ

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(GAL4, DNA-binding domain fusion products with intracellular antigens; in two-hybrid screening of single-chain antibody library)

Antibodies and Immunoglobulins TT

> RL: BPN (Biosynthetic preparation); BIOL (Biological study); PREP (Preparation)

```
(heavy chain; generation of single-chain antibody
         repertoire by site-specific recombination in vectors
         for variable region gene fragments for)
IT
     PCR (polymerase chain reaction)
         (in generation of single-chain antibody CDR3 region diversity
         in relation to recognition of cognate intracellular antigen)
IT
     Transcription factors
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
         (lexA, DNA-binding domain fusion products with intracellular
         antigens; in two-hybrid screening of single-chain antibody library)
IT
     Antibodies and Immunoglobulins
     RL: BPN (Biosynthetic preparation); BIOL (Biological study);
     PREP (Preparation)
         (light chain; generation of single-chain antibody
         repertoire by site-specific recombination in vectors
         for variable region gene fragments for)
TΤ
     cDNA library
         (of vectors expressing single-chain antibodies to
         intracellular antigens)
IT
     Genetic element
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
         (origin of replication; of vectors expressing single-chain
         antibodies to intracellular antigens)
L93 ANSWER 23 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                            2002:927553 CAPLUS
DOCUMENT NUMBER:
                            138:13510
TITLE:
                            CDR-grafted anti-human p40 antibodies for diagnosis
                            and treatment of conditions mediated by interleukin 12
INVENTOR(S):
                            Peritt, David; Carton, Jill M.
PATENT ASSIGNEE(S):
                           Centocor, Inc., USA
SOURCE:
                           PCT Int. Appl., 87 pp.
                           CODEN: PIXXD2
DOCUMENT TYPE:
                            Patent
LANGUAGE:
                            English
FAMILY ACC. NUM. COUNT:
                           1
PATENT INFORMATION:
     PATENT NO.
                          KIND
                                   DATE
                                               APPLICATION NO.
                                                                           DATE
     -----
                           ----
                                   _____
                                                 -----
                                                                           _____
     WO 2002097048
                       A2
A3
                                    20021205
                                                WO 2002-US16876
                                                                           20020528
     WO 2002097048
                                    20030904
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ,
              VN, YU, ZA, ZW
          RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG,
              KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN,
              GQ, GW, ML, MR, NE, SN, TD, TG
     US 2003157105
                            A1
                                20030821
                                              US 2002-156255
                                                                           20020528
PRIORITY APPLN. INFO.:
                                                 US 2001-294503P
                                                                      P 20010530
     Entered STN: 06 Dec 2002
ED
AB
     The present invention relates to at least one novel anti-p40 or human
     IL-12 Ig-derived protein, including isolated nucleic acids that encode at
     least one anti-p40 Ig derived protein, IL-12, vectors, host cells,
```

transgenic animals or plants, and methods of making and using thereof, including therapeutic compns., methods and devices. The humanized anti-p40 antibodies and fragments are useful for treating IL-12-mediated diseases.

IC ICM C12N

CC 15-3 (Immunochemistry)

Section cross-reference(s): 1, 2, 3, 63

IT Adrenoceptor agonists

Alkylating agents, biological

Analgesics

Anesthetics

Animal cell

Animal tissue

Animals

Antiasthmatics

Anticoagulants

Antidepressants

Antidiabetic agents

Antidiarrheals

Antiemetics

Antimicrobial agents

Antipsychotics

Antirheumatic agents

Antitussives

Antiulcer agents

Anxiolytics

Chemical compounds

Drugs

Epitopes

Eukaryota

Genetic vectors

HeLa cell

Hormone replacement therapy

Human

Hypnotics and Sedatives

Hypnotics and Sedatives

 ${\tt Immunosuppressants}$

Immunotherapy

Labels

Laxatives

Leukotriene antagonists

Lymphoma

Mammalia

Medical goods

Molecular cloning

Multiple myeloma

Mus

Muscle relaxants

Narcotics

Nervous system stimulants

Neuromuscular blocking agents

Nutrition, animal

Organ, animal

Oryctolagus cuniculus

Packaging materials

Primates

Prokaryota

Protein sequences

Radiopharmaceuticals

Rattus

Rodentia Vaccines (CDR-grafted anti-human p40 antibodies for diagnosis and treatment of conditions mediated by interleukin 12) Corticosteroids, biological studies IT Cytokines Minerals, biological studies Nucleic acids RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (CDR-grafted anti-human p40 antibodies for diagnosis and treatment of conditions mediated by interleukin 12) Antibodies and Immunoglobulins TT RL: BPN (Biosynthetic preparation); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (heavy chain, variable; CDR-grafted anti-human p40 antibodies for diagnosis and treatment of conditions mediated by interleukin 12) IT Antibodies and Immunoglobulins RL: BPN (Biosynthetic preparation); DGN (Diagnostic use) ; PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (humanized; CDR-grafted anti-human p40 antibodies for diagnosis and treatment of conditions mediated by interleukin 12) ΙT Antibodies and Immunoglobulins RL: BPN (Biosynthetic preparation); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (light chain, variable; CDR-grafted anti-human p40 antibodies for diagnosis and treatment of conditions mediated by interleukin 12) L93 ANSWER 24 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN ACCESSION NUMBER: 2002:716487 CAPLUS DOCUMENT NUMBER: 137:246554 TITLE: Therapeutic antibody binding molecules against CD45 antigen isoforms INVENTOR (S): Aversa, Gregorio; Kolbinger, Frank; Carballido Herrera, Jose M.; Aszodi, Andras; Saldanha, Jose W.; Hall, Bruce M. PATENT ASSIGNEE(S): Novartis A.-G., Switz.; Novartis-Erfindungen Verwaltungsgesellschaft m.b.H.; Novartis Pharma GmbH PCT Int. Appl., 67 pp. SOURCE: CODEN: PIXXD2 DOCUMENT TYPE: Patent LANGUAGE: English FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE			
WO 2002072832	A2 20020919	WO 2002-EP1420	20020211			
WO 2002072832	A3 20040325					
W: AE, AG, A	, AM, AT, AU, AZ,	BA, BB, BG, BR, BY, BZ,	CA, CH, CN,			
CO, CR, CI	, CZ, DE, DK, DM,	DZ, EC, EE, ES, FI, GB,	GD, GE, GH,			
HR, HU, II	, IL, IN, IS, JP,	KE, KG, KP, KR, KZ, LC,	LK, LT, LU,			
LV, MA, M	, MK, MN, MX, NO,	NZ, OM, PH, PL, PT, RO,	RU, SE, SG,			
SI, SK, T	, TM, TN, TR, TT,	UA, US, UZ, VN, YU, ZA,	ZW			
RW: AM, AZ, B	K, KG, KZ, MD, RU,	TJ, TM, AT, BE, CH, CY,	DE, DK, ES,			

```
FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR
                                                                   20020211
    CA 2437963
                          AΑ
                                20020919
                                            CA 2002-2437963
                                            EP 2002-711860
                                                                   20020211
                                20040526
    EP 1421191
                          A2
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
    BR 2002007151
                         Α
                                20041005
                                            BR 2002-7151
                                                                   20020211
                         T2
                                            JP 2002-571886
                                                                   20020211
    JP 2004533816
                                20041111
                                            CN 2002-804785
                                                                   20020211
    CN 1551919
                         Α
                                20041201
                                            ZA 2003-5911
                                                                   20030731
     ZA 2003005911
                         Α
                                20040628
                                            NO 2003-3549
                                                                   20030811
    NO 2003003549
                         Α
                                20031010
    US 2004096901
                        A1
                                20040520
                                           US 2004-467546
                                                                   20040105
                                                                A 20010212
PRIORITY APPLN. INFO.:
                                            GB 2001-3389
                                            WO 2002-EP1420
                                                                W 20020211
    Entered STN: 20 Sep 2002
ED
    The invention relates to chimeric or humanized antibody against CD45
AΒ
     antigen isoforms. The said binding mols. comprise at least one
     antigen binding site, comprising the
    hypervariable regions CDR1, CDR2 and CDR3 or
     the hypervariable regions CDR1', CDR2' and
     CDR3'. The binding mols. of the invention inhibit primary mixed
     lymphocyte responses (MLR). Cells derived from cultures treated with
     CD45RO/RB binding mols. preferredly also have impaired proliferative
     responses in secondary MLR even in the absence of CD45RO/RB binding mols.
     in the secondary MLR. In vivo administration of CD45RO/RB binding mol. to
     severe combined immunodeficiency (SClD) mice undergoing xeno-GVHD
     following injection with human PBMC may prolong mice survival, compared to
     control treated mice, even though circulating human T cells may still be
    detected in CD45RO/RB binding mol. treated mice.
IC
    ICM C12N015-13
    ICS C07K016-28; C12N015-79; C12N015-10; A61K039-395; A61P037-00
    15-3 (Immunochemistry)
CC
     Section cross-reference(s): 1, 13
     Antibodies and Immunoglobulins
IT
    RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
    PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
        (fragments, CDR1, CDR2, CDR3,
        CDR1', CDR2' and CDR3'; therapeutic
        antibody binding mols. against CD45 antigen isoforms)
     Antibodies and Immunoglobulins
IT
    RL: BPN (Biosynthetic preparation); BSU (Biological study,
     unclassified); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (humanized; therapeutic antibody binding mols. against CD45
        antigen isoforms)
     Antibodies and Immunoglobulins
IT
    RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
        (light chain; therapeutic antibody binding mols.
        against CD45 antigen isoforms)
IT
    Molecular cloning
       Protein sequences
     cDNA sequences
        (of antibody; therapeutic antibody binding mols. against CD45 antigen
        isoforms)
IT
     460710-86-5P
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
```

```
(CDR1 of chimeric antibody; therapeutic antibody binding
        mols. against CD45 antigen isoforms)
IT
     460710-89-8P
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
         (CDR1' of chimeric antibody; therapeutic antibody binding
        mols. against CD45 antigen isoforms)
IT
     460710-87-6P
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
         (CDR2 of chimeric antibody; therapeutic antibody binding
         mols. against CD45 antigen isoforms)
     460710-90-1P
IT
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
         (CDR2' of chimeric antibody; therapeutic antibody binding
        mols. against CD45 antigen isoforms)
     460710-88-7P
TΤ
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
         (CDR3 of chimeric antibody; therapeutic antibody binding
        mols. against CD45 antigen isoforms)
TТ
     460710-91-2P
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
         (CDR3' of chimeric antibody; therapeutic antibody binding
        mols. against CD45 antigen isoforms)
L93 ANSWER 25 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                           2002:615858 CAPLUS
DOCUMENT NUMBER:
                           137:184461
                           Cloning of anti-renal cell carcinoma monoclonal IgG1
TITLE:
                           G250 VH and VL gene and its use for producing its
                            recombinant antibodies as therapeutic agents
INVENTOR(S):
                           Bolhuis, Reinier L. H.; Woehl, Thorsten; Boettger,
                           Volker
PATENT ASSIGNEE(S):
                           Wilex A.-G., Germany
                           PCT Int. Appl., 18 pp.
SOURCE:
                           CODEN: PIXXD2
DOCUMENT TYPE:
                           Patent
LANGUAGE:
                           English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:
     PATENT NO.
                         KIND
                                   DATE
                                               APPLICATION NO. DATE
     -----
                           ----
                                   -----
                                                 -----
                                                                           _ _ _ _ _ _ _
     WO 2002063010
                            A2
                                   20020815
                                                 WO 2002-EP1283
                                                                           20020207
     WO 2002063010
                            C2
                                   20020912
                           А3
     WO 2002063010
                                   20031127
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW
```

```
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB,
             GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA,
             GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                20040204
                                           EP 2002-722053
                                                                   20020207
    EP 1385959
                          A2
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                                            US 2003-635908
                                                                   20030807
    US 2004219633
                          A1
                                20041104
                                                                P
PRIORITY APPLN. INFO.:
                                            US 2001-266853P
                                                                   20010207
                                            US 2001-327008P
                                                                P
                                                                   20011005
                                            WO 2002-EP1283
                                                                W
                                                                   20020207
    Entered STN: 16 Aug 2002
ED
    The invention relates to novel nucleic acid sequences which encode an
AB
    antibody suitable in the field of tumor diagnostics and therapeutics.
    Specifically, the cDNAs coding for heavy chain and light chain variable
    regions (containing VH and VL complementary determining regions CDR1,
    CDR2, and CDR3) of anti-renal cell carcinoma monoclonal
    IgG1 G250 (originally isolated from hybridoma cell line G250) are
    disclosed. Further, a method of producing recombinant antibodies is
    provided, wherein the novel nucleic acid sequences are employed. Addnl.,
    the recombinant antibody G250 (anti-idiotypic) is used to map the epitope
    of RCC associated polypeptide using peptide mass fingerprint anal. by MALDI
    mass spectroscopy. The chimeric G250 antibodies are useful in RCC therapy
    and diagnosis.
    ICM C12N015-13
TC
    ICS C12N015-79; C07K016-30; A61K039-395; G01N033-574; G01N033-577;
          A61K047-48
CC
    15-3 (Immunochemistry)
    Section cross-reference(s): 1, 3, 14
IT
    Protein sequences
    cDNA sequences
        (G250 IgG1 VH and VL CDR regions; hybridoma cell line G250 and use for
       producing monoclonal antibodies as therapeutic agents for renal cell
       carcinoma)
IT
    Antibodies and Immunoglobulins
    RL: ARG (Analytical reagent use); BPN (Biosynthetic preparation)
     ; DGN (Diagnostic use); THU (Therapeutic use); ANST
     (Analytical study); BIOL (Biological study); PREP (Preparation);
    USES (Uses)
        (anti-idiotypic, monoclonal IgG1 G250, anti-RCC, chimeric
        antibody G250; hybridoma cell line G250 and use for producing
       monoclonal antibodies as therapeutic agents for renal cell carcinoma)
IT
    Protein motifs
        (antigen-binding site, of antibody G250
       VH or VL CDR1-3 region; hybridoma cell line G250 and use for
       producing monoclonal antibodies as therapeutic agents for renal cell
       carcinoma)
IT
    Antibodies and Immunoglobulins
    RL: ARG (Analytical reagent use); BPN (Biosynthetic preparation)
     ; DGN (Diagnostic use); THU (Therapeutic use); ANST
     (Analytical study); BIOL (Biological study); PREP (Preparation);
    USES (Uses)
        (fragments, monoclonal IgG1 G250, anti-RCC, chimeric antibody
       G250; hybridoma cell line G250 and use for producing monoclonal
       antibodies as therapeutic agents for renal cell carcinoma)
IT
    Antibodies and Immunoglobulins
    RL: ARG (Analytical reagent use); BPN (Biosynthetic preparation)
     ; DGN (Diagnostic use); THU (Therapeutic use); ANST
     (Analytical study); BIOL (Biological study); PREP (Preparation);
    USES (Uses)
```

(fusion products, anti-RCC, chimeric antibody G250 or its derivs.; hybridoma cell line G250 and use for producing monoclonal antibodies as therapeutic agents for renal cell carcinoma) IT Antibodies and Immunoglobulins RL: BPN (Biosynthetic preparation); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (light chain, of G250 IgG1, gene for; hybridoma cell line G250 and use for producing monoclonal antibodies as therapeutic agents for renal cell carcinoma) 448933-58-2P IT 205869-45-0P 448933-59-3P 448933-60-6P 448933-61-7P 448933-62-8P RL: BPN (Biosynthetic preparation); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (amino acid sequence of antibody G250 VH or VL CDR1-3 peptide; hybridoma cell line G250 and use for producing monoclonal antibodies as therapeutic agents for renal cell carcinoma) L93 ANSWER 26 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN ACCESSION NUMBER: 2002:594996 CAPLUS DOCUMENT NUMBER: 137:164675 Focused libraries of genetic packages for display or TITLE: expression of antibody peptides Ladner, Robert Charles INVENTOR(S): PATENT ASSIGNEE(S): USA PCT Int. Appl., 92 pp. SOURCE: CODEN: PIXXD2 DOCUMENT TYPE: Patent English LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: PATENT NO. KIND DATE APPLICATION NO. DATE _____ ----_____ -----WO 2002061071 WO 2001-US50297 A2 20020808 20011218 WO 2002061071 20030912 **A3** W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG CA 2432377 20020808 AΑ CA 2001-2432377 20011218 US 2001-26925 US 2003119056 Α1 20030626 20011218 EP 2001-998098 EP 1360288 A2 20031112 20011218

ED Entered STN: 09 Aug 2002

T2

JP 2004518432

PRIORITY APPLN. INFO.:

AB Focused libraries of vectors or genetic packages that display, display and express, or comprise a member of a diverse family of antibody peptides, polypeptides or proteins and collectively display, display and express, or comprise at least a portion of the focused diversity of the family. The

20040624

AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

JP 2002-561628

US 2000-256380P

WO 2001-US50297

20011218

P 20001218

W 20011218

libraries have length and sequence diversities that mimic that found in native human antibodies and are characterized by variegation in their heavy chain and light chain complementarity determining regions (CDRs). The diversities of heavy chain and the κ and λ light chains are best constructed in sep. vectors. First, a synthetic gene is designed to embody each of the synthetic variable domains. The light chains are bounded by restriction sites for ApaLI (positioned at the very endo of the signal sequence) and AscI (positioned after the stop codon). The heavy chain is bounded by SfiI (positioned within the PelB signal sequence) and NotI (positioned in the linker between CH1 and the anchor protein). The initial genes are made with "stuffer" sequences in place of the desired CDRs. Examination of 3-dimensional models of a humanized antibody, identifies specific requirements for the side groups of the CDR1, CDR2, and CDR3 regions of the light and heavy chains. The DNA that encodes the preferred CDRs is synthesized using trinucleotide building blocks so that each desired amino acid residue at the variable positions is present in essentially equimolar or other described amts. ICM C12N015-00 3-2 (Biochemical Genetics) Section cross-reference(s): 15 Genetic vectors Human Nucleic acid library Peptide library Phage display library (focused libraries of genetic packages for display or expression of antibody peptides) Antibodies and Immunoglobulins RL: ANT (Analyte); BPN (Biosynthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation) (heavy chain; focused libraries of genetic packages for display or expression of antibody peptides) Antibodies and Immunoglobulins RL: ANT (Analyte); BPN (Biosynthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation) (humanized; focused libraries of genetic packages for display or expression of antibody peptides) Antibodies and Immunoglobulins RL: ANT (Analyte); BPN (Biosynthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation) (light chain; focused libraries of genetic packages for display or expression of antibody peptides) 446076-12-6, 1: PN: WO02061071 TABLE: 2 unclaimed DNA 446076-14-8 446076-15-9, 4: PN: WO02061071 TABLE: 2 446076-13-7 unclaimed DNA 446076-16-0, 5: PN: WO02061071 TABLE: 2 unclaimed DNA RL: PRP (Properties) (unclaimed nucleotide sequence; focused libraries of genetic packages for display or expression of antibody peptides) L93 ANSWER 27 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN 2002:555514 CAPLUS ACCESSION NUMBER: DOCUMENT NUMBER: 137:124198 TITLE: Single-chain antibody to conformational epitope on fibronectin expressed within tumor-associated stroma INVENTOR (S): De Kruif, Cornelis Adriaan; Logtenberg, Ton; Pennings, Marinus Theodorus Thomas; De Boer, Henrieette Christine PATENT ASSIGNEE(S): Crucell Holland B.V., Neth. PCT Int. Appl., 67 pp. SOURCE:

IC

IT

TΤ

IT

IT

IT

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO.							APPLICATION NO.						DATE				
	WO	2002	0572						WO 2002-NL42					20020118				
	WO	2002	0572	90		A3		2002	1121									
	WO	2002	0572	90		C1		20031113										
		W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
		•	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	ΚP,	KR,	KZ,	LC,	LK,	LR,
			LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	ΝZ,	OM,	PH,
			ΡL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	TJ,	TM,	TN,	TR,	TT,	TZ,
			UA,	ŪĠ,	US,	UZ,	VN,	ΥU,	ZA,	ZM,	zw							
		RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
			KG,	KΖ,	MD,	RU,	ТJ,	TM,	AT,	BE,	CH,	CY,	DE,	DK,	ES,	FI,	FR,	GB,
			GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,
			GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG							
	EΡ	1224	943			A1		2002	0724	EP 2001-200212			12		20010119			
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
			IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR						
	CA	2434	099			AA		2002	0725		CA 2	002-	2434	099	20020118			
	ΕP	1355	667			A2		2003	1029		EP 2	002-	7105	53		2	0020	118
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
			IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR						
	JP	2004	5232	30		T2		2004	0805		JP 2	002-	5579	66		2	0020	118
	US	2004	2142	47		A1		2004	1028	1	US 2	004-	4664	66		2	0040	423
PRIO	RIT	APP	LN.	INFO	. :						EP 2	001-	2002	12		A 2	0010	119
										1	US 2	001-	2630	28P		P 2	0010	119
										1	WO 2	002-	NL42			W 2	0020	118

- Entered STN: 26 Jul 2002 ED
- The authors disclose the preparation and characterization of an scFv antibody AB reactive with human dermal microvascular endothelial cells. The antibody (FibMab) is demonstrated to bind to fibronectin; the binding is enhanced in association with gelatin or collagen. In immunohistochem. studies, the fibronectin epitope reactivity was demonstrated to be present in tumor stroma.
- ICM CO7K TC
- 15-3 (Immunochemistry) CC

Section cross-reference(s): 8, 14

IT Diagnosis

Diagnosis

(cancer; antibodies and antibody fragments to conformational epitope of fibronectin expressed within tumor-associated stroma)

IT Tumor markers

(conformational epitope of fibronectin expressed within tumor-associated stroma)

Antibodies and Immunoglobulins IT

> RL: ARG (Analytical reagent use); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(humanized; to conformational epitope on fibronectin expressed within tumor-associated stroma)

IT 442850-93-3

RL: PRP (Properties)

(heavy chain CDR3 of antibody to conformational epitope of fibronectin expressed within tumor-associated stroma)

IT 442850-94-4

RL: PRP (Properties)

(light chain CDR3 of antibody to conformational epitope of fibronectin expressed within tumor-associated stroma)

L93 ANSWER 28 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:556133 CAPLUS

DOCUMENT NUMBER: 137:124205

TITLE: Humanized or CDR-grafted murine anti-human CD4 antigen

monoclonal antibodies for treating graft rejection and

helper T cell disorders

INVENTOR(S): Jolliffe, Linda K.; Ziyin, Robert A.; Pulito, Virginia

L.; Adair, John R.; Athwal, Diljeet S.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 61 pp., Cont.-in-part of U.S.

Ser. No. 426,334, abandoned.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 6

PATENT INFORMATION:

						APPLICATION NO.	DATE
US	2002099	179		A1	20020725	US 1999-229200	
	2268744					GB 1993-18911	19901221
					19940511		
						GB 1993-18912	19901221
GB	2268745			B2	19940511		
EP	620276			A1	19941019	EP 1994-104042	19901221
	R: AT	, BE,	CH,	DE,	DK, ES, FR,	GB, GR, IT, LI, LU,	NL, SE
EP	626390			A1	19941130	EP 1994-202090	19901221
					20011114		
	R: AT	, BE,	CH,	DE,	DK, ES, FR,	GB, GR, IT, LI, LU,	NL, SE
JP	1124395	5		A2	19990914	JP 1997-353861	19901221
CA	2129219			C	19981222	CA 1991-2129219 US 1994-303569 GB 1989-28874	19910306
US	5859205			Α	19990112	US 1994-303569	19940907
PRIORITY	APPLN.	INFO	. :			GB 1989-28874 US 1992-997471 US 1993-146677 US 1994-315303 US 1995-426334 ED 1991-901433	A 19891221
						US 1992-997471	B1 19921228
						US 1993-146677	B1 19931101
						US 1994-315303	B1 19940929
						US 1995-426334	B2 19950421
						EP 1991-901433	A3 19901221
						JP 1991-501864	A3 19901221
						CA 1991-2037607	
						GB 1991-17611	
						GB 1991-17612	
						US 1991-743329	B1 19910917

ED Entered STN: 26 Jul 2002

AB There are disclosed: a CDR-grafted antibody having at least one chain wherein the framework regions are predominantly derived from a first antibody (acceptor) and at least one CDR is derived from a second antibody (donor), the CDR-grafted antibody being capable of binding to the CD4 antigen; processes for its production; nucleotide sequences for use in its production; and compns. containing them. DNA encoding the murine monoclonal antibody OKT4A heavy and light chains has been grafted onto the frameworks of the human heavy chain KOL and light chain REI antibody genes. These variable domains are ligated to the DNA encoding human κ light chain and IgG4 heavy chain constant portion. The resulting CDR-grafted genes are expressed in COS-1 cells.

```
ICM C12P021-08
INCL 530387300
    15-3 (Immunochemistry)
    Section cross-reference(s): 3
    Antibodies and Immunoglobulins
    RL: BPN (Biosynthetic preparation); BSU (Biological study,
    unclassified); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (IqG1; humanized or CDR-grafted murine anti-human
        CD4 antigen monoclonal antibodies for treating graft rejection and
       helper T cell disorders)
    Antibodies and Immunoglobulins
    RL: BPN (Biosynthetic preparation); BSU (Biological study,
    unclassified); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (IqG4; humanized or CDR-grafted murine anti-human
        CD4 antiqen monoclonal antibodies for treating graft rejection and
        helper T cell disorders)
    Antibodies and Immunoglobulins
    RL: BPN (Biosynthetic preparation); BSU (Biological study,
    unclassified); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (fusion products; humanized or CDR-grafted murine
        anti-human CD4 antigen monoclonal antibodies for treating graft
        rejection and helper T cell disorders)
IT
    Antibodies and Immunoglobulins
    RL: BPN (Biosynthetic preparation); BSU (Biological study,
    unclassified); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (heavy chain; humanized or CDR
        -grafted murine anti-human CD4 antigen monoclonal antibodies for
        treating graft rejection and helper T cell disorders)
    Animal cell line
IT
      DNA sequences
    Drug delivery systems
    Genetic vectors
    Human
    Mammalia
    Molecular cloning
    Mus
    Protein sequences
    Rodentia
     Transplant rejection
        (humanized or CDR-grafted murine anti-human CD4 antigen monoclonal
        antibodies for treating graft rejection and helper T cell disorders)
IT
    Antibodies and Immunoglobulins
     Gene, animal
     RL: BPN (Biosynthetic preparation); BSU (Biological study,
     unclassified); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (humanized or CDR-grafted murine anti-human CD4
        antigen monoclonal antibodies for treating graft rejection and helper T
        cell disorders)
    Antibodies and Immunoglobulins
TT
    RL: BPN (Biosynthetic preparation); BSU (Biological study,
     unclassified); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (humanized; humanized or CDR-grafted
        murine anti-human CD4 antigen monoclonal antibodies for treating graft
        rejection and helper T cell disorders)
```

TТ Antibodies and Immunoglobulins

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(light chain; humanized or CDR

-grafted murine anti-human CD4 antigen monoclonal antibodies for treating graft rejection and helper T cell disorders)

Antibodies and Immunoglobulins IT

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (monoclonal; humanized or CDR-grafted murine anti-human CD4 antigen monoclonal antibodies for treating graft rejection and helper T cell disorders)

L93 ANSWER 29 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:553064 CAPLUS

DOCUMENT NUMBER: 137:114482

Fibronectin as a tumor marker detected by TITLE:

phage antibodies

PATENT ASSIGNEE(S): Crucell Holland B.V., Neth. SOURCE: Eur. Pat. Appl., 29 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent English LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO.								APPLICATION NO.										
	EP										EP 2001-200212								
		R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
			ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	ΑL,	TR							
	CA	2434	099			AA		2002	0725	CA 2002-2434099						20020118			
	WO	2002	0572	90		A2		2002	0725	,	WO 2	002-	NL42			2	20020118		
	WO	2002	0572	90		A 3		2002	1121										
	WO	2002	0572	90		C1		2003	1113										
		W:	AE,	AG,	AL,	AM,	ΑT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,	
			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	
			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,	LK,	LR,	
			LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,	
			PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TN,	TR,	TT,	TZ,	
			UA,	ŪĠ,	US,	UZ,	VN,	YU,	ZA,	ZM,	ZW		-			·		-	
		RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,	
																		GB,	
																		GA,	
									SN,			•	•	•	•	•	•	•	
	EΡ	1355							1029			002-	7105	53		2	0020	118	
		R:	AT,	BE.	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI.	LU.	NL.	SE,	MC.	PT,	
						-	-		MK,	-	•		•			•		•	
	JР	2004					-	-		-			5579	66		2	0020	118	
		2004															0040	423	
PRIO		APP												12			0010		
					•									28P			0010		
ED	WO 2002-NL42 W 20020118 ED Entered STN: 26 Jul 2002																		

Means and method for at least partial inhibition of tumor growth are provided. Methods makes use of binding mols. capable of specifically binding to an epitope present on a subset of fibronectin proteins. By providing an individual with a binding mol. of the invention it is

possible to interfere with sites of angiogenesis or sites that seen active angiogenesis in the recent past. Through this interference blood flow is at least in part inhibited. Through this inhibition it is possible to at least in part inhibit processes dependent on active angiogenesis in said individual, such as tumor growth.

IC ICM A61K039-395

ICS C07K016-28; A61P035-00; A61K047-48; A61K051-10; G01N033-53;
 C12N005-10; C12N015-13; C07K016-18; C12N015-62; A01K067-027;
 A01H005-00

ICA C07K014-78

CC 63-3 (Pharmaceuticals)

Section cross-reference(s): 15

- ST antitumor angiogenesis inhibitor fibronectin tumor marker
- IT Proteins
 - RL: BSU (Biological study, unclassified); BIOL (Biological study) (58,000-mol.-weight, gene E1 of adenovirus; fibronectin as a tumor marker detected by phage antibodies in relation to angiogenesis inhibition)
- IT Proteins
 - RL: BSU (Biological study, unclassified); BIOL (Biological study) (58,000-mol.-weight, gene E2A of adenovirus; fibronectin as a tumor marker detected by phage antibodies in relation to angiogenesis inhibition)
- IT Proteins
 - RL: BSU (Biological study, unclassified); BIOL (Biological study) (59,000-mol.-weight, gene E1 of adenovirus; fibronectin as a tumor marker detected by phage antibodies in relation to angiogenesis inhibition)
- IT Proteins
 - RL: BSU (Biological study, unclassified); BIOL (Biological study) (59,000-mol.-weight, gene E2A of adenovirus; fibronectin as a tumor marker detected by phage antibodies in relation to angiogenesis inhibition)
- IT Proteins
 - RL: BSU (Biological study, unclassified); BIOL (Biological study) (60,000-mol.-weight, gene E1 of adenovirus; fibronectin as a tumor marker detected by phage antibodies in relation to angiogenesis inhibition)
- IT Proteins
 - RL: BSU (Biological study, unclassified); BIOL (Biological study) (60,000-mol.-weight, gene E2A of adenovirus; fibronectin as a tumor marker detected by phage antibodies in relation to angiogenesis inhibition)
- IT Proteins
 - RL: BSU (Biological study, unclassified); BIOL (Biological study) (6000-mol.-weight, gene E1 of adenovirus; fibronectin as a tumor marker detected by phage antibodies in relation to angiogenesis inhibition)
- IT Proteins
 - RL: BSU (Biological study, unclassified); BIOL (Biological study) (6000-mol.-weight, gene E2A of adenovirus; fibronectin as a tumor marker detected by phage antibodies in relation to angiogenesis inhibition)
- IT Proteins
 - RL: BSU (Biological study, unclassified); BIOL (Biological study) (62,000-mol.-weight, gene El of adenovirus; fibronectin as a tumor marker detected by phage antibodies in relation to angiogenesis inhibition)
- IT Proteins
 - RL: BSU (Biological study, unclassified); BIOL (Biological study)

(62,000-mol.-weight, gene E2A of adenovirus; fibronectin as a tumor marker detected by phage antibodies in relation to angiogenesis inhibition)

IT Proteins

RL: BSU (Biological study, unclassified); BIOL (Biological study) (63,000-mol.-weight, gene El of adenovirus; fibronectin as a tumor marker detected by phage antibodies in relation to angiogenesis inhibition)

IT Proteins

RL: BSU (Biological study, unclassified); BIOL (Biological study) (63,000-mol.-weight, gene E2A of adenovirus; fibronectin as a tumor marker detected by phage antibodies in relation to angiogenesis inhibition)

IT Proteins

RL: BSU (Biological study, unclassified); BIOL (Biological study) (64,000-mol.-weight, gene E1 of adenovirus; fibronectin as a tumor marker detected by phage antibodies in relation to angiogenesis inhibition)

IT Proteins

RL: BSU (Biological study, unclassified); BIOL (Biological study) (64,000-mol.-weight, gene E2A of adenovirus; fibronectin as a tumor marker detected by phage antibodies in relation to angiogenesis inhibition)

IT Proteins

RL: BSU (Biological study, unclassified); BIOL (Biological study) (65,000-mol.-weight, gene E1 of adenovirus; fibronectin as a tumor marker detected by phage antibodies in relation to angiogenesis inhibition)

IT Proteins

RL: BSU (Biological study, unclassified); BIOL (Biological study) (65,000-mol.-weight, gene E2A of adenovirus; fibronectin as a tumor marker detected by phage antibodies in relation to angiogenesis inhibition)

IT Proteins

RL: BSU (Biological study, unclassified); BIOL (Biological study) (66,000-mol.-weight, gene E1 of adenovirus; fibronectin as a tumor marker detected by phage antibodies in relation to angiogenesis inhibition)

IT Proteins

RL: BSU (Biological study, unclassified); BIOL (Biological study) (66,000-mol.-weight, gene E2A of adenovirus; fibronectin as a tumor marker detected by phage antibodies in relation to angiogenesis inhibition)

IT Proteins

RL: BSU (Biological study, unclassified); BIOL (Biological study) (67,000-mol.-weight, gene E1 of adenovirus; fibronectin as a tumor marker detected by phage antibodies in relation to angiogenesis inhibition)

IT Proteins

RL: BSU (Biological study, unclassified); BIOL (Biological study) (67,000-mol.-weight, gene E2A of adenovirus; fibronectin as a tumor marker detected by phage antibodies in relation to angiogenesis inhibition)

IT Proteins

RL: BSU (Biological study, unclassified); BIOL (Biological study) (68,000-mol.-weight, gene El of adenovirus; fibronectin as a tumor marker detected by phage antibodies in relation to angiogenesis inhibition)

IT Proteins

RL: BSU (Biological study, unclassified); BIOL (Biological study)

(68,000-mol.-weight, gene E2A of adenovirus; fibronectin as a tumor marker detected by phage antibodies in relation to angiogenesis inhibition) IT Proteins RL: BSU (Biological study, unclassified); BIOL (Biological study) (70,000-mol.-weight, gene E1 of adenovirus; fibronectin as a tumor marker detected by phage antibodies in relation to angiogenesis inhibition) IT Proteins RL: BSU (Biological study, unclassified); BIOL (Biological study) (70,000-mol.-weight, gene E2A of adenovirus; fibronectin as a tumor marker detected by phage antibodies in relation to angiogenesis inhibition) Antibodies and Immunoglobulins TТ RL: BSU (Biological study, unclassified); BIOL (Biological study) (CDR3 region; fibronectin as a tumor marker detected by phage antibodies in relation to angiogenesis inhibition) Human adenovirus IT(El protein of; fibronectin as a tumor marker detected by phage antibodies in relation to angiogenesis inhibition) Animal cell line IT (HDMEC-1; fibronectin as a tumor marker detected by phage antibodies in relation to angiogenesis inhibition) IT Bacteriophage Human (antibodies; fibronectin as a tumor marker detected by phage antibodies in relation to angiogenesis inhibition) Intestine, neoplasm IT (colon; fibronectin as a tumor marker detected by phage antibodies in relation to angiogenesis inhibition) ITFibronectins RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study) (epitopes of; fibronectin as a tumor marker detected by phage antibodies in relation to angiogenesis inhibition) Angiogenesis inhibitors TΤ Antitumor agents Aves Bladder, neoplasm Drug delivery systems Embryophyta Extracellular matrix Genetic vectors Head and Neck, neoplasm Head and Neck, neoplasm Lung, neoplasm Mammary gland, neoplasm Neoplasm Pancreas, neoplasm Plants Primates Prostate gland, neoplasm Rodentia Skin, neoplasm (fibronectin as a tumor marker detected by phage antibodies in relation to angiogenesis inhibition) TT Tumor antigens RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(fibronectin as a tumor marker detected by phage antibodies

```
in relation to angiogenesis inhibition)
     Antibodies and Immunoglobulins
TT
     Radionuclides, biological studies
     Toxins
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (fibronectin as a tumor marker detected by phage antibodies
        in relation to angiogenesis inhibition)
     Proteins
IT
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (gene El of adenovirus; fibronectin as a tumor marker
        detected by phage antibodies in relation to angiogenesis inhibition)
IT
     Proteins
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (gene E2A of adenovirus; fibronectin as a tumor marker
        detected by phage antibodies in relation to angiogenesis inhibition)
IT
     Neoplasm
     Neoplasm
        (head and neck; fibronectin as a tumor marker detected by
        phage antibodies in relation to angiogenesis inhibition)
IT
     Antibodies and Immunoglobulins
     RL: THU (Therapeutic use); BIOL (Biological study); USES
     (Uses)
         (humanized; fibronectin as a tumor marker detected
        by phage antibodies in relation to angiogenesis inhibition)
     Endothelium
IT
        (microvascular; fibronectin as a tumor marker detected by
        phage antibodies in relation to angiogenesis inhibition)
IT
     Blood vessel
        (microvessel, endothelium; fibronectin as a tumor marker
        detected by phage antibodies in relation to angiogenesis inhibition)
IT
     Epitopes
        (of fibronectin; fibronectin as a tumor marker detected by
        phage antibodies in relation to angiogenesis inhibition)
TT
     Antibodies and Immunoglobulins
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (single chain; fibronectin as a tumor marker detected by
        phage antibodies in relation to angiogenesis inhibition)
     442850-93-3P
                    442850-94-4P
TТ
     RL: BPN (Biosynthetic preparation); PAC (Pharmacological activity); PRP
     (Properties); THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
        (fibronectin as a tumor marker detected by phage antibodies
        in relation to angiogenesis inhibition)
     442990-49-0
                   442990-50-3
                                 442990-51-4
                                               442990-52-5, 9: PN: EP1224943
IT
     PAGE: 10 unclaimed DNA
     RL: PRP (Properties)
        (unclaimed nucleotide sequence; fibronectin as a tumor marker
        detected by phage antibodies)
                   442850-96-6
IT
     442850-95-5
                                 442850-97-7
     RL: PRP (Properties)
        (unclaimed sequence; fibronectin as a tumor marker detected
        by phage antibodies)
REFERENCE COUNT:
                         15
                               THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS
                               RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
L93 ANSWER 30 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                         2002:708108 CAPLUS
DOCUMENT NUMBER:
                         138:3454
                         In vitro neutralization of Human Immunodeficiency
TITLE:
                         Virus Type-1 subtype B and E with humanized monoclonal
```

antibody NM-01

AUTHOR(S): Yokono, Akira; Nakamori, Shogo; Nakamura, Mariko
CORPORATE SOURCE: Department of Microbiology (I), The Jikei University

Department of Microbiology (I), The Jikei University School of Medicine, Tokyo, 105-8461, Japan

SCHOOL OF Medicine, Tokyo, 105-8461, Japan SOURCE: Jikeikai Medical Journal (2002), 49(1), 3-11

CODEN: JMEJAS; ISSN: 0021-6968

PUBLISHER: Jikei University School of Medicine

DOCUMENT TYPE: Journal LANGUAGE: English ED Entered STN: 18 Sep 2002

AB Humanization of certain antibody by transplanting the complementarity determining region (CDR) to a human Ig framework attempts to reduce the response

against a foreign mol. in human body during passive immunization. We transferred the CDR from the murine monoclonal antibody (MoAb) NM-01 to a human IgG2b frame. The humanized NM-01 (hNM-01) neutralizes Human Immunodeficiency Virus Type-1 (HIV-1) as its murine progenitor. Moreover, hNM-01 shows enhanced neutralization of HIV-1. We have shown that this increase in reactivity may be attributed to residue 4 of the humanized x chain, where the presence of a methionine residue rather than the murine leucine appears to promote a more advantageous conformation of the antigen binding site, perhaps via packing

interactions with the Vx CDR1. The capacity of hNM-01 to neutralize both lab strains and clin. isolates was also examined with the expectation that hNM-01 will prove suitable for development as a therapeutic agent. This reshaped antibody reacted with several clin. isolates of HIV-1 tested, including subtype B and subtype E. Moreover, we proved the inhibitory activity for syncytium formation, which indicates the ability for the inhibition of cell to cell HIV transmission. These findings may provide new opportunities for the development of a therapeutic Ig against AIDS.

CC 15-3 (Immunochemistry)

IT Protein sequences

(amino acid sequence of humanized monoclonal antibody NM-01 that neutralized HIV-1 subtypes B and E)

IT Antibodies and Immunoglobulins

RL: BPN (Biosynthetic preparation); PAC (Pharmacological activity); PRP (Properties); BIOL (Biological study); PREP (Preparation)

(monoclonal, humanized; neutralizing; NM-01; neutralization of HIV-1 subtype B and E with humanized monoclonal antibody NM-01)

REFERENCE COUNT:

37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L93 ANSWER 31 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:98608 CAPLUS

DOCUMENT NUMBER:

132:136425

TITLE:

Use of CD25 binding molecules in the treatment of

rheumatoid arthritis or skin diseases

INVENTOR(S):
PATENT ASSIGNEE(S):

Amlot, Peter Lloyd; Schreier, Max H.

EE(S): Novartis A.-G., Switz.; Novartis-Erfindungen

Verwaltungsgesellschaft m.b.H.; University College

London

SOURCE:

PCT Int. Appl., 14 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

```
APPLICATION NO. DATE
    PATENT NO.
                        KIND
                               DATE
                                                                 _____
                        ----
                                           ______
     _____
                               _____
                                           WO 1999-EP5316
                                                                19990726
    WO 2000006604
                         A2
                               20000210
                               20000615
    WO 2000006604
                        A3
            AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,
            DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS,
            JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK,
            MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,
            TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ,
            MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,
            ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,
            CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
    AU 9957286
                         A1
                               20000221 AU 1999-57286
                                                                  19990726
    EP 1100829
                         A2
                               20010523
                                        EP 1999-944294
                                                                  19990726
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, FI
                                           JP 2000-562400
     JP 2002521491
                         T2
                               20020716
                                                                  19990726
    US 2002110558
                         A1
                               20020815
                                           US 2001-770002
                                                                  20010125
PRIORITY APPLN. INFO.:
                                           GB 1998-16281
                                                              A 19980727
                                           GB 1999-12460
                                                              A 19990527
                                           WO 1999-EP5316
                                                              W 19990726
     Entered STN: 11 Feb 2000
ED
     Use of a CD25 binding mol., such as a chimeric anti-CD25 antibody, which
AΒ
     comprises at least one antigen binding site
     comprising at least one domain that comprises a sequence of the
     hypervariable regions CDR1, CDR2 and CDR3;
     said CDR1 having the amino acid sequence Arg-Tyr-Trp-Met-His,
     said CDR2 having the amino acid sequence Ala-Ile-Tyr-Pro-Gly-Asn-
     Ser-Asp-Thr-Ser-Tyr-Asn-Gln-Lys-Phe-Glu-Gly, and said CDR3
     having the amino acid sequence Asp-Tyr-Gly-Tyr-Tyr-Phe-Asp-Phe, in the
     treatment of rheumatoid arthritis or inflammatory or hyperproliferative
    skin diseases.
IC
    ICM C07K016-28
     ICS A61K039-395
CC
     15-3 (Immunochemistry)
IT
    Antibodies
    RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); THU (Therapeutic use); BIOL (Biological
     study); USES (Uses)
        (chimeric; use of CD25-binding mols. in the treatment of
        rheumatoid arthritis or skin diseases)
L93 ANSWER 32 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                        2001:49959 CAPLUS
DOCUMENT NUMBER:
                        135:151297
                        Virolysis and in vitro neutralization of HIV-1 by
TITLE:
                        humanized monoclonal antibody hNM-01
AUTHOR (S):
                        Nakamura, Mariko; Terada, Masaki; Sasaki, Hiroyuki;
                        Kamada, Minori; Ohno, Tsuneya
                        Department of Microbiology, Jikei University School of
CORPORATE SOURCE:
                        Medicine, Tokyo, 105-8461, Japan
                        Hybridoma (2000), 19(6), 427-434
SOURCE:
                        CODEN: HYBRDY; ISSN: 0272-457X
                        Mary Ann Liebert, Inc.
PUBLISHER:
DOCUMENT TYPE:
                        Journal
                        English
LANGUAGE:
     Entered STN: 19 Jan 2001
ED
    Antibody humanization by transplanting the complementarity determining region
AB
```

(CDR) to a human framework aims to reduce the response of the human immune system against a foreign mol. during passive immunization. We transferred the CDR from the murine monoclonal antibody (MAb) NM-01 to a human IgG frame. The humanized NM-01 (hNM-01) recognizes the same epitope on Human Immunodeficiency Virus type 1 (HIV-1) envelope as its murine progenitor, but with greater efficiency, and shows enhanced neutralization of HIV-1. We have shown that this increase in reactivity may be attributed to residue 4 of the humanized κ chain, where the presence of a methionine residue rather than the murine leucine appears to promote a more advantageous conformation of the antigen-binding site, perhaps via packing interactions with the Vk CDR1. The capacity of humanized NM-01 to neutralize direct clin. isolates was also examined with the expectation that hNM-01 will prove suitable for development as a therapeutic agent. This reshaped antibody reacted with several clin. isolates of HIV-1 tested. Moreover, we proved the ability of this antibody of its activation of complement by flow cytometry and electron microscopy anal. Although hNM-01 alone was capable of neutralizing HIV-1, the presence of complement enhanced neutralization. The enhancement of complement activation was also observed in hNM-01 than murine progenitor. This finding supports a potential role for antibody-dependent complement-mediated virolysis and more effective neutralization in HIV-1 therapy.

CC 15-3 (Immunochemistry)

IT Antibodies

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(humanized; virolysis and in vitro neutralization of HIV-1 by humanized monoclonal antibody hNM-01)

IT Antibodies

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(monoclonal, neutralizing; virolysis and in vitro neutralization of HIV-1 by humanized monoclonal antibody hNM-01)

REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L93 ANSWER 33 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1998:618323 CAPLUS

DOCUMENT NUMBER: 129:259328

TITLE: Nucleic acid molecules encoding a single-chain antibody comprising the VH and VL complementarity-

determining regions from antibody 15D3 specific for

multiple-drug resistance in cancer

INVENTOR(S): Ring, David B.
PATENT ASSIGNEE(S): Chiron Corp., USA

SOURCE: U.S., 26 pp., Cont.-in-part of U.S. Ser. No. 323,566,

abandoned.
CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
US 5811267	A	19980922	US 1995-475000	19950607		
US 5959084	Α	19990928	US 1995-480527	19950607		
US 6106833	Α	20000822	US 1997-968335	19971112		

```
US 6143873
                                20001107
                                            US 1999-337800
                                                                   19990622
                          Α
                                            US 1990-605399
                                                                B1 19901029
PRIORITY APPLN. INFO.:
                                            US 1993-141375
                                                               B1 19931022
                                            US 1994-323566
                                                               B2 19941017
                                            US 1995-452809
                                                               B1 19950530
                                            US 1995-480527
                                                                A1 19950607
     Entered STN: 30 Sep 1998
ED
    Novel compns. are provided that are derived from antigen-
AB
    binding sites of Igs having affinity for cancer
     antigens. The compns. exhibit immunol. binding properties of antibody
     mols. capable of binding specifically to a human tumor cell displaying a
     MDR phenotype. A number of synthetic mols. are provided that include CDR and
     FR regions derived from same or different Ig moieties. Also provided are
     single-chain polypeptides wherein VH and VL domains are attached by a
     single polypeptide linker. The scFv mols. can include ancillary
     polypeptide moieties which can be bioactive, or which provide a site of
     attachment for other useful moieties. The compns. are useful in specific
     binding assays, affinity purification schemes, drug or toxin targeting,
     imaging, and genetic or immunol. therapeutics for various cancers. The
     invention thus provides novel polypeptides, the DNAs encoding those
     polypeptides, expression cassettes comprising those DNAs, and methods of
     inducing the production of the polypeptides.
     ICM C12P021-04
IC
     ICS C07K016-00; C07H021-04
INCL 435069700
     15-3 (Immunochemistry)
     Section cross-reference(s): 3
IT
     Antibodies
     RL: BPN (Biosynthetic preparation); BUU (Biological use,
     unclassified); PRP (Properties); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
        (humanized; nucleic acid mols. encoding a single-chain
        antibody comprising the VH and VL complementarity-determining regions from
        antibody 15D3 specific for multiple-drug resistance in cancer)
TT
     Protein sequences
        (of single-chain antibody comprising the VH and VL complementarity-
        determining regions from antibody 15D3 specific for multiple-drug resistance
        in cancer)
IT
     213396-02-2
     RL: BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological
     study); USES (Uses)
        (complementary-determining region CDR1 of heavy chain-encoding;
        nucleic acid mols. encoding a single-chain antibody comprising the VH
        and VL complementarity-determining regions from antibody 15D3 specific for
        multiple-drug resistance in cancer)
     213396-07-7
IT
     RL: BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological
     study); USES (Uses)
        (complementary-determining region CDR1 of light
        chain-encoding; nucleic acid mols. encoding a single-chain
        antibody comprising the VH and VL complementarity-determining regions from
        antibody 15D3 specific for multiple-drug resistance in cancer)
ΙT
     213396-03-3
     RL: BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological
     study); USES (Uses)
        (complementary-determining region CDR2 of heavy chain-encoding;
        nucleic acid mols. encoding a single-chain antibody comprising the VH
        and VL complementarity-determining regions from antibody 15D3 specific for
        multiple-drug resistance in cancer)
     209338-02-3
IT
```

RL: BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); USES (Uses) (complementary-determining region CDR2 of light chain-encoding; nucleic acid mols. encoding a single-chain antibody comprising the VH and VL complementarity-determining regions from antibody 15D3 specific for multiple-drug resistance in cancer) IT 213396-05-5 RL: BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); USES (Uses) (complementary-determining region CDR3 of heavy chain-encoding; nucleic acid mols. encoding a single-chain antibody comprising the VH and VL complementarity-determining regions from antibody 15D3 specific for multiple-drug resistance in cancer) IT 213396-08-8 RL: BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); USES (Uses) (complementary-determining region CDR3 of light chain-encoding; nucleic acid mols. encoding a single-chain antibody comprising the VH and VL complementarity-determining regions from antibody 15D3 specific for multiple-drug resistance in cancer) REFERENCE COUNT: THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT L93 ANSWER 34 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN ACCESSION NUMBER: 1995:578106 CAPLUS DOCUMENT NUMBER: 122:312624 Humanization of mouse ONS-M21 antibody with the aid of TITLE: hybrid variable regions Ohtomo, Toshihiko; Tsuchiya, Masayuki; Sato, Koh; AUTHOR (S): Shimizu, Keiji; Moriuchi, Syusuke; Miyao, Yasuyoshi; Akimoto, Toshio; Akamatsu, Ken-ichi; Hayakawa, Toru; Ohsugi, Yoshiyuki Chugai Pharmaceutical Co. Ltd., Fuji-Gotemba Research CORPORATE SOURCE: Laboratories, Shizuoka, 565, Japan SOURCE: Molecular Immunology (1995), 32(6), 407-16 CODEN: MOIMD5; ISSN: 0161-5890 PUBLISHER: Elsevier DOCUMENT TYPE: Journal LANGUAGE: English ED Entered STN: 27 May 1995 Mouse monoclonal antibody, ONS-M21, directed against human medulloblastoma cells, has been humanized by complementarity determining region (CDR) grafting. A humanized ONS-M21 VH region, comparable to the original mouse ONS-M21 VH region, was easily constructed based on framework regions (FRs) 1, 2 and 3 from human EU antibody and on FR4 from human ND antibody. Five alterations in the FRs were made at amino acids 27, 28, 29, 30 and 94 which are all part of the canonical structure for CDR1 (H1). The humanized ONS-M21 VL regions were constructed based on the FRs from human REI antibody. The authors first identified five amino acid residues in the FRs at positions 20, 21, 71, 73 and 87 as having possible adverse influences on antigen binding. None of the versions with a variety of combinations at these five positions showed any binding to antigen. To identify the mouse residues that must be retained in the human FRs, hybrid VL regions were constructed by joining the mouse ONS-M21 VL region and the first humanized version within CDR2. The hybrid VL regions revealed that residues in FR1 and/or FR2 were critical in creating a functional antigen binding site. Redesigning several versions with alterations in FR1 and FR2 revealed that the Pro-46 residue was the only critical residue for creating an antigen binding site. This approach should be

helpful in identifying key residues in difficult cases of antibody humanization.

CC 15-3 (Immunochemistry)

Section cross-reference(s): 3

IT Protein sequences

(humanization of mouse ONS-M21 antibody to human medulloblastoma with aid of hybrid variable regions)

IT Antibodies

RL: BAC (Biological activity or effector, except adverse); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PREP (Preparation) (monoclonal, humanization of mouse ONS-M21 antibody to human medulloblastoma with aid of hybrid variable regions)

L93 ANSWER 35 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1994:433149 CAPLUS

DOCUMENT NUMBER: 121:33149

TITLE: Reshaped monoclonal antibodies against an

immunoglobulin isotype

INVENTOR(S): Hardman, Norman; Kolbinger, Frank; Saldanha, Jose PATENT ASSIGNEE(S): Ciba-Geigy A. G., Switz.; Tanox Biosystems, Inc.;

Novartis AG; Novartis Pharma GmbH

ADDITCATION NO

DATE

SOURCE: Eur. Pat. Appl., 68 pp.

KTND

CODEN: EPXXDW

חאתם

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PA	PATENT NO.		KIND DATE		APPLICATION NO.					DATE					
EP	589840			A1	-	1994	0330	EF	1993	 -8106	53		1	9930	915
ED	589840			B1		2004	0414						_		
	R: AT,								R. TE	. тт.	LT.	LU.	NL.	PT.	SE
SG	49856	,	011,	A1		2002	0319	SC.	1996	,, -7641	,	,	1	9930	915
TA	264388			E		2004	0415	ΑΊ	1993	-8106	53		1	9930	915
PT	49856 264388 589840 1452542			T		2004	0831	PΊ	1993	-8106	53		1	9930	915
EP	1452542			A2		2004	0901	E	2004	-8222			1	9930	915
	R: AT,	BE.	CH.	DE.	DK	. ES.	FR.	GB, G	R. IT	LI.	LU,	NL.	SE,	PT,	ΙE
AU	2219640 9347488			A 1		1994	0331	ΑU	1993	-4748	8		1	9930	920
AU	675449			B2		1997	0206								
CA	2106719			AA		1994	0325	CF	1993	-2106	719		1	9930	922
CA	2106719			С		2006	0328								
FI	9304145			Α		1994	0325	Fl	1993	-4145			1	9930	922
FI	114550			В1		2004	1115								
	9303394					1994	0325	NC	1993	-3394			1	9930	923
	318210						0221								
ZA	9307033			Α		1994	0811	$\mathbf{Z}F$	1993	-7033			1	9930	
CN	1088986			Α		1994	0706	CN	1993	-1198	45		1	9930	924
CN	1078250			В											
	06225788					1994			1993	-2381	80		1	9930	924
	3636737						0406								
CN	1428352			Α					2001						
FI	200400069	96		Α		2004			2004	-696			2	0040	519
	115838						0729								
JP	20043577	12		A2			1224		2004	-2010	96		2	0040	707
JP	3718214			B2		2005	1124				_				
PRIORIT	Y APPLN.	INFO	.:						1992						
								US	1992	-9528	02		A 1	9920	925

EP 1993-810653 A3 19930915 JP 1993-238180 A3 19930924

ED Entered STN: 23 Jul 1994

The reshaped human monoclonal antibody against isotypic determinants of IgE comprises the antigen-binding sites of CDR1, CDR2, and CDR3 of murine antibody TES-C21. The DNA sequences encoding the reshaped human C21VL (C21-L2 and C21-L3) and C21VH (C21-H3, C21-Hay1, and C21-Hay3) were synthesized and expressed in COS cells. Permanent cell lines producing the reshaped human antibodies were also prepared by transformation of mouse myeloma NSO cells. The antibodies of the invention are useful for diagnostics, prophylaxis, and treatment of allergy.

IC ICM C12N015-13

ICS C12P021-08; C12N005-10; C12N015-62; A61K039-395; G01N033-577; G01N033-68

CC 15-3 (Immunochemistry)

IT Immunoglobulins

RL: PREP (Preparation)

(humanized, to IgE, recombinant preparation of)

IT Protein sequences

(of humanized anti-IgE Ig variable regions)

IT Immunoglobulins

RL: PREP (Preparation)

(E, humanized Ig to, recombinant preparation of)

L93 ANSWER 36 OF 45 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on

STN

ACCESSION NUMBER: 2004:209127 BIOSIS DOCUMENT NUMBER: PREV200400209727

TITLE: Castleman's tumours and production of autoantibody in

paraneoplastic pemphigus.

AUTHOR(S): Wang, Liangchun; Bu, Dingfang; Yang, Yong; Chen, Xixue;

Zhu, Xuejun [Reprint Author]

CORPORATE SOURCE: Department of Dermatology, Peking University First

Hospital, Beijing, 100034, China

ZHUXJ@public.bta.net.cn

SOURCE: Lancet (North American Edition), (February 14 2004) Vol.

363, No. 9408, pp. 525-531. print.

ISSN: 0099-5355 (ISSN print).

DOCUMENT TYPE: Article LANGUAGE: English

ENTRY DATE: Entered STN: 14 Apr 2004

Last Updated on STN: 14 Apr 2004

AB Background Paraneoplastic pemphigus is an autoimmune mucocutaneous disease associated with Castleman's tumours, which when surgically removed often result in great improvement of mucocutaneous lesions. An IgG autoantibody against epidermal proteins is often used as a diagnostic marker for disease. Our aim was to ascertain the role of Castleman's tumours in production of the autoantibody and pathogenesis of paraneoplastic pemphigus. Methods We enrolled seven patients with paraneoplastic pemphigus associated with Castleman's disease and assessed the effect of removal of tumours on mucocutaneous lesions in six individuals and on autoantibody titre with indirect immunofluorescence in four patients. We cultured tumour cells from one patient and assayed the secreted autoantibody. Finally, we characterised the gene sequence and expression of the variable region of the immunoglobulin heavy chain (IgVH) in tumour B cells from all patients by reverse transcription-PCR,

DNA sequencing, and in-situ hybridisation. Findings Cutaneous lesions disappeared within 6-11 weeks after resection of tumours. Mucosal lesions also improved in this period, but lasted for 5-10 months overall. Autoantibody titre decreased and became undetectable within 5-9 weeks in three of four patients assessed. We identified secreted autoantibody, similar to that identified in patients' serum, in cultured tumour cells. The tumour B-cells of the seven patients shared and expressed two rearrangement patterns of complementarity determining region 3 (CDR3) of IqVH. Interpretation Secreted autoantibody from Castleman's tumours, which reacts against epidermal proteins, could be an essential factor in the pathogenesis of paraneoplastic pemphigus. We noted clonal rearrangement, resulting in similar variable regions of IgVH, in tumour B cells isolated from all seven patients. However, whether this pattern is associated with autoimmunity remains to be ascertained. Major Concepts Clinical Immunology (Human Medicine, Medical Sciences); Oncology (Human Medicine, Medical Sciences) Parts, Structures, & Systems of Organisms B cells: blood and lymphatics, immune system Diseases Castleman's disease: immune system disease, neoplastic disease, immunology Giant Lymph Node Hyperplasia (MeSH) Diseases autoimmune mucocutaneous disease: immune system disease Diseases paraneoplastic pemphigus: immune system disease, neoplastic disease, immunology, pathology Diseases tumor: neoplastic disease Neoplasms (MeSH) Chemicals & Biochemicals IgG autoantibody: production; epidermal proteins; immunoglobulin heavy chain: complementarity determining region 3 ANSWER 37 OF 45 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN ACCESSION NUMBER: 2005:36139 BIOSIS PREV200500039088 DOCUMENT NUMBER: TITLE: High sensitivity of chemiluminescent methodology for detection of clonal CDR3 sequences in patients with acute lymphoblastic leukemia. Leal, E.; Jaloma-Cruz, A. R.; Barros-Nunez, P. [Reprint AUTHOR (S): Authorl CIBODiv Genet, IMSS, Sierra Mojada 800, Col Independencia ZC CORPORATE SOURCE: I-3838, Guadalajara, Jalisco, 44340, Mexico pbarros qdl@yahoo.com.mx Hematological Oncology, (June 2004) Vol. 22, No. 2, pp. SOURCE: 55-61. print. ISSN: 0278-0232 (ISSN print). DOCUMENT TYPE: Article General Review; (Literature Review) LANGUAGE: English Entered STN: 19 Jan 2005 ENTRY DATE: Last Updated on STN: 19 Jan 2005 Detection of minimal residual disease (MRD) in patients with B-cell acute

lymphoblastic leukemia (B-ALL) has been achieved using several radioactive labelling methodologies; however, limited information exists about the use of chemiluminescent labelling. Although many malignant disorders are

AB

IT

IT

IT

IT

IT

IT

IT

L93

related to cytogenetic alterations, there is not a consistent chromosomal translocation that could serve as a tumour marker for the monitoring of MRD. ALL are derived from B-lymphocytes in 80% of cases. In the early stages of their maturation, the immunoglobulin heavy chain genes (IgH) undergo rearrangements among their V, D, and J segments, giving rise to the Complementary Determining Regions (CDR). Among these, CDR3 is considered unique for each lymphocyte and used as a tumour-specific marker in B-ALL patients. In this study, the CDR3 was labelled with digoxigenin and used as a patient-specific probe to test its sensitivity for further detection of MRD. Fourteen pretreatment samples of bone marrow (BM) or peripheral blood (PB) from B-ALL patients were included. Tumour-specific probes were designed from each clonal product by elimination of the consensus sequences. Ten digoxigenin-labelled probes were hybridized with a mixture of their respective clonal DNA and the polyclonal product from a normal healthy donor, in serial dilutions from 1: 1 up to 1:107. sensitivity range of 1: 103-1:106 was obtained, with an average of 1:105. Crossed tests performed in four patients, showed right probe specificity in all cases. We propose that the design of allele-specific probes with chemiluminescent labelling, represents a reliable, sure and sensitive alternative methodology for MRD detection in patients with B-cell lymphoproliferative disorders. Copyright Copyright 2004 John Wiley & Sons, Ltd.

IT Major Concepts

Hematology (Human Medicine, Medical Sciences); Methods and Techniques; Oncology (Human Medicine, Medical Sciences)

IT Parts, Structures, & Systems of Organisms

B-lymphocyte: blood and lymphatics, immune system; bone marrow: blood and lymphatics, immune system; peripheral blood: blood and lymphatics

IT Diseases

B-cell acute lymphoblastic leukemia: blood and lymphatic disease, neoplastic disease Leukemia, B-Cell, Acute (MeSH)

IT Diseases

minimal residual disease: neoplastic disease Neoplasm, Residual (MeSH)

IT Chemicals & Biochemicals

DNA; digoxigenin; immunoglobulin heavy chain gene

L93 ANSWER 38 OF 45 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN

ACCESSION NUMBER: 2003:356773 BIOSIS DOCUMENT NUMBER: PREV200300356773

TITLE: Immunoglobulin Light Chain

Rearrangements in B-Cell Differentiation: Lessons from

Myeloma.

AUTHOR(S): Perfetti, Vittorio [Reprint Author]; Vignarelli, Maurizio

Colli; Navazza, Valentina; Palladini, Giovanni; Giachino,

Claudia; Merlini, Giampaolo

CORPORATE SOURCE: Internal Medicine and Medical Oncology, IRCCS Policlinico

S. Matteo, Pavia, Italy

SOURCE: Blood, (November 16 2002) Vol. 100, No. 11, pp. Abstract

No. 2639. print.

Meeting Info.: 44th Annual Meeting of the American Society of Hematology. Philadelphia, PA, USA. December 06-10, 2002.

American Society of Hematology. CODEN: BLOOAW. ISSN: 0006-4971.

DOCUMENT TYPE: Conference; (Meeting)

Conference; (Meeting Poster)

Conference; Abstract; (Meeting Abstract)

LANGUAGE: English

ENTRY DATE: Entered STN: 6 Aug 2003

Last Updated on STN: 6 Aug 2003

Recent evidence document that B cells can undergo secondary rearrangements AB in the light chain loci even thought they already express a functional antibody receptor. As consequence, new variable (V) regions can be formed. This process can occur during marrow B-cell maturation ("receptor editing", a phenomenon linked to self-tolerance) or at some point of the germinal center reaction ("receptor revision", a still disputed process that is possibly related to antibody-affinity maturation). To study light chain secondary recombination events, we used myeloma as a "single cell-model" of post-germinal center, antigen-selected B cells and took advantage of the fact that kappa light chains usually rearrange before the lambda ones. The kappa locus of lambda myeloma (29 clones) was then searched for V-J rearrangements with features that might suggest expression prior to lambda light chain-isotype switching (in frame rearrangement, no stop codons, no pseudogenes). line with the hierarchical model of ordered immunoglobulin light chain gene rearrangement, DNA-PCR amplification demonstrated that all lambda myeloma cases showed both kappa alleles rearranged and inactivated via the kappa deleting element (Kde). Kde was preferentially rearranged to a Vkappa segment (Vkappa-Kde, 69%) than to the intronic recombination signal sequence (IRSS) (Vkappa-Jkappa/IRSS-Kde, 31%). Since only IRSS-Kde inactivation preserves former Vkappa-Jkappa regions, no more than a fraction (18 of 58, 31%) of alleles were informative. Vkappa-Jkappa remnants showed Vkappa family usage different from normal and myeloma kappa light chains, because of overrepresentation of the VkappaII family (50% of cases). Increased usage of distal Vkappa and Jkappa segments (i.e. Jkappa4) was also observed, a marker of multiple secondary rearrangements. Evidence of light chain receptor changes, either as "editing" or "revision", were observed in a significant proportion (4/18, 22%) of Vkappa-Jkappa remnants (i.e., functional Vkappa segments and productively rearranged CDR3). Somatic mutations, a marker of expression in the germinal center, were found in 2 of 4 productive joints. One case (involving B3, the single member of the VkappaIV family, and Jkappa3) presented 10 nucleotide substitutions that were distributed in frameworks (4/6) and CDRs (6/10). These data strongly suggest that the Vkappa-Jkappa joint was part of the immunoglobulin receptor when the original myeloma B cell underwent the germinal center reaction, it was hypermutated, and subsequently revised to lambda light chain. This study demonstrates that light chain editing and revision can occur during the evolution of a B cell clone toward its terminal plasma cell differentiation. Intense and renewed RAG1/2 activity may contribute to immunoglobulin translocations that are common in B-cell disorders. IT Major Concepts Clinical Immunology (Human Medicine, Medical Sciences); Hematology (Human Medicine, Medical Sciences); Oncology (Human Medicine, Medical Sciences) IT Parts, Structures, & Systems of Organisms B-cell: blood and lymphatics, immune system IT Diseases myeloma: blood and lymphatic disease, immune system disease, neoplastic disease

IT

Multiple Myeloma (MeSH) Chemicals & Biochemicals

CDR3

L93 ANSWER 39 OF 45 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on

STN

ACCESSION NUMBER: 2003:336498 BIOSIS DOCUMENT NUMBER: PREV200300336498

TITLE: Absence of B-Cell, NK-Cell, Myeloid or CD34+ Cell

Engraftment in Some X-Linked Severe Combined

Immunodeficiency (XSCID) Patients Following Haploidentical

Transplant.

AUTHOR(S): Hay, Beverly N. [Reprint Author]; Puck, Jennifer M.

[Reprint Author]; Uzel, Gulbu [Reprint Author]; Davis, Joie
[Reprint Author]; Hsu, Amy P. [Reprint Author]; Linton,
Gilda [Reprint Author]; Woltz, Patricia [Reprint Author];

Malech, Harry L. [Reprint Author]

CORPORATE SOURCE: Genet and Mol Biol Branch, NHGRI, NIH, Bethesda, MD, USA

SOURCE:

Blood, (November 16 2002) Vol. 100, No. 11, pp. Abstract

No. 1800. print.

Meeting Info.: 44th Annual Meeting of the American Society of Hematology. Philadelphia, PA, USA. December 06-10, 2002.

American Society of Hematology. CODEN: BLOOAW. ISSN: 0006-4971.

DOCUMENT TYPE: Conference; (Meeting)

Conference; (Meeting Poster)

Conference; Abstract; (Meeting Abstract)

LANGUAGE: English

ENTRY DATE: Entered STN: 23 Jul 2003

Last Updated on STN: 23 Jul 2003

XSCID, characterized by absent T cells and non-functional B cells, is AB caused by defects in IL2RG, the gene encoding the common gamma chain (gammac) of receptors for IL-2, -4, -7, -9, -15 and -21. Although the standard therapy, allogeneic bone marrow transplant (BMT), is life-saving and has completely cured some patients, many have persistent cellular immune defects and fail to make antibodies. We evaluated clinical status, hematopoietic lineage engraftment, and immune function in 8 immunodeficient post-BMT XSCID patients from 4 BMT centers. patients were 5-18 years old and had received 1-4 non-conditioned, T-cell depleted, haploidentical BMTs 3-11 years earlier. They continued to experience frequent infections leading to school absences and hospitalizations. All required regular immunoglobulin replacement. Chronic health problems were: sinusitis (7/8); rashes, including chronic viral infections with warts and/or molluscum contagiousum (6/8); chronic pulmonary changes (6/8); growth failure (5/8); hepatitis (5/8); diarrhea or colitis (4/8); and hearing loss (1/8). Etiologies of these problems may include repeated or chronic sub-clinical infections, autoimmunity, graft versus host disease, and adverse effects of antibiotics. Engraftment was evaluated by genotyping DNA from purified hematopoietic lineages in comparison with donor and pre-BMT host DNA. T cells were of donor origin in 6/8 patients, but B cells, granulocytes and monocytes were host-derived in 8/8 patients. Immunological assessment included lymphocyte number, immunoglobulin levels, immunophenotyping, proliferation, and levels of T cell receptor excision circles (TRECs). All patients had lymphopenia (mean 1500/mul) and one had eosinophilia averaging 2072/mul. Serum IgA and IgM levels were low or undetectable. CD3+ T-cell numbers were low in 5/8. Proliferation to mitogens was decreased or absent in 6/8, and antigen-specific responses were impaired in 8/8. TRECs were low in one patient and absent in another. In addition, spectratyping displayed skewed CDR3 patterns in 5/5. Six patients received G-CSF (10 mug/kg x 6 days) and underwent apheresis to harvest peripheral mobilized stem cells, study chimerism in CD34+ cells, and collect cells for potential gene

therapy. All 6 XSCID patients demonstrated marked increase in WBC (mean 50,000/mul) and circulating CD34+ cells (18-98/mul) in response to mobilization, in contrast to 2 previously treated ADA deficient SCID patients who did not respond to G-CSF mobilization with increases in WBC or CD34+ cells. PCR assay of CD34+ cell chimerism in 6/6 patients showed 100% host markers, suggesting that their BMTs provided little or no permanent hematopoietic stem cell (HSC) replacement and consistent with the observed ineffective production of naive T cells. However, the persistence of circulating donor T cells highlights the in vivo selective advantage for CD3+ cells with functional gammac. Ex vivo transfer of IL2RG to autologous HSC instead of BMT in newly diagnosed XSCID infants (Fischer et al.) demonstrated reconstitution of immunity. Gene therapy for older patients with poor immune reconstitution post-BMT may offer similar benefit. Ex vivo addition of correct IL2RG to autologous CD34+ cells could improve production of functional lymphoid lineages in these patients. Major Concepts Clinical Immunology (Human Medicine, Medical Sciences); Hematology (Human Medicine, Medical Sciences); Methods and Techniques; Pediatrics (Human Medicine, Medical Sciences) Parts, Structures, & Systems of Organisms B-cell: blood and lymphatics, immune system; CD34-positive cell: blood and lymphatics, immune system; NK cell: blood and lymphatics, immune system, natural killer cell; T cell: blood and lymphatics, immune system; WBC: blood and lymphatics, immune system, white blood cell; bone marrow: blood and lymphatics, immune system; lung: respiratory system; lymphocyte: blood and lymphatics, immune system; myeloid cell: blood and lymphatics, immune system; serum: blood and lymphatics X-linked severe combined immunodeficiency: genetic disease, immune system disease Diseases chronic pulmonary disease: respiratory system disease colitis: digestive system disease Colitis (MeSH) diarrhea: digestive system disease Diarrhea (MeSH) Diseases eosinophilia: blood and lymphatic disease Eosinophilia (MeSH) Diseases growth failure: disease-miscellaneous hearing loss: ear disease Hearing Disorders (MeSH) hepatitis: digestive system disease Hepatitis (MeSH) lymphopenia: blood and lymphatic disease, immune system disease Lymphopenia (MeSH) Diseases molluscum contagiosum: infectious disease, integumentary system disease, viral disease Molluscum Contagiosum (MeSH) Diseases sinusitis: respiratory system disease

Sinusitis (MeSH)

IT

IT Diseases

skin rash: integumentary system disease

IT Diseases

wart: infectious disease, integumentary system disease, viral disease

IT Chemicals & Biochemicals

G-CSF [granulocyte-colony stimulating factor]: immunologic-drug; IgG [immunoglobulin G]; IgM [immunoglobulin M]; T cell receptor excision circle [TREC]; immunoglobulin

L93 ANSWER 40 OF 45 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on

ACCESSION NUMBER:

2000:246719 BIOSIS PREV200000246719

DOCUMENT NUMBER: TITLE:

SOURCE:

Optimized multiplex IgH/ras PCR: A tool for quantitative

monitoring of B-lymphoproliferative disorders.

AUTHOR (S):

Slavickova, Alena [Reprint author]; Ullmannova, V.; Klener,

Р.

CORPORATE SOURCE:

1st Department of Internal Medicine, Department of Hematology, Laboratory of Molecular Biology, Charles

University, U Nemocnice 2, 128 08, Prague 2, Czech Republic Biotechniques, (April, 2000) Vol. 28, No. 4, pp. 716-721.

print.

CODEN: BTNQDO. ISSN: 0736-6205.

DOCUMENT TYPE:

Article English

LANGUAGE: ENTRY DATE:

Entered STN: 14 Jun 2000

Last Updated on STN: 5 Jan 2002

The use of quantitative PCR is recommended to monitor the level of residual hematological malignancies. The proposed multiplex IgH/ras PCR uses a co-amplification of the clonal CDR3 rearrangement of the immunoglobulin heavy chain gene (IgH) as a disease marker and a segment of the Hras 1 gene containing codon 61 (ras) as a control gene. Serial dilutions of stored diagnostic DNAs are examined together in the same PCR at a sub-plateau phase and, after analysis by densitometry, the amount of CDR3 product is related to the ras product. An increase of this ratio at comparable amounts of DNA is viewed as an increase of malignant cells. This endpoint PCR quantifying approach appears to be applicable in monitoring B-lymphoproliferative disorders as was shown to be true in B-cell non-Hodgkin's lymphoma and may provide information on disease activity and treatment outcome.

IT Major Concepts

Molecular Genetics (Biochemistry and Molecular Biophysics); Immune System (Chemical Coordination and Homeostasis); Oncology (Human Medicine, Medical Sciences); Methods and Techniques

IT Diseases

B-lymphoproliferative disorders: blood and lymphatic disease, immune system disease, neoplastic disease, quantitative monitoring

IT Diseases

Hodgkin's disease: blood and lymphatic disease, immune system disease, neoplastic disease, quantitative monitoring
Hodgkin Disease (MeSH)

IT Chemicals & Biochemicals

DNA: analysis; immunoglobulin H: analysis; ras: analysis

L93 ANSWER 41 OF 45 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN

ACCESSION NUMBER: 1998:428380 BIOSIS DOCUMENT NUMBER: PREV199800428380

TITLE: Design and use of a phage display library: Human

antibodies with subnanomolar affinity against a

marker of angiogenesis eluted from a

two-dimensional gel.

AUTHOR(S): Pini, Alessandro; Viti, Francesca; Santucci, Annalisa;

Carnemolla, Barbara; Zardi, Luciano; Neri, Paolo; Neri,

Dario [Reprint author]

CORPORATE SOURCE: Institut fuer Molekularbiologie und Biophysik, ETH

Honggerberg, CH-8093 Zurich, Switzerland

SOURCE: Journal of Biological Chemistry, (Aug. 21, 1998) Vol. 273,

No. 34, pp. 21769-21776. print. CODEN: JBCHA3. ISSN: 0021-9258.

DOCUMENT TYPE: Article LANGUAGE: English

ENTRY DATE: Entered STN: 7 Oct 1998

Last Updated on STN: 7 Oct 1998

We report the construction and the use of a phage display human antibody library (>3 X 108 clones) based on principles of protein design. A large repertoire of functional antibodies with similar properties was produced by appending short variable complementarity determining region 3 (CDR3) onto the two antibody germ line segments most frequently found in human antibodies. With this strategy we concentrated sequence diversity in regions of the antibody structure that are centrally located in the antigen binding site, while leaving residues in more peripheral positions available for further mutagenesis aimed at improving the affinity of the selected antibodies. In addition, the library was tested by selecting antibodies against six biologically relevant antigens. Using only 0.3 mg of antigen eluted from a two-dimensional gel spot, we isolated binders specific for the ED-B domain of fibronectin, a marker of angiogenesis. These antibodies recognize the native antigen with affinities in the 107108 M-1 range, and perform well in immunosorbent assays, in two-dimensional Western blotting and in immunohistochemistry. The affinity of one anti-ED-B antibody was improved by 27-fold by combinatorially mutating six strategically selected residues in the heavy chain variable domain. further 28-fold affinity improvement could be achieved by mutating residues 32 and 50 of the light chain. The resulting antibody, L19, bound to the ED-B domain of fibronectin with very high affinity (Kd = 54 pM), as determined by real-time interaction analysis with surface plasmon resonance detection, band shift analysis, and by competition experiments with electrochemiluminescent detection.

IT Major Concepts

Biochemistry and Molecular Biophysics; Methods and Techniques

IT Chemicals & Biochemicals

phage display human antibody library: cloning, synthesis

L93 ANSWER 42 OF 45 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on

STN

ACCESSION NUMBER: 1998:512661 BIOSIS DOCUMENT NUMBER: PREV199800512661

TITLE: Structure of Bcl-1 and IgH-CDR3 rearrangements as

clonal markers in mantle cell lymphomas.

AUTHOR(S): Pott, C. [Reprint author]; Tiemann, M.; Linke, B.; Ott, M.

M.; Von Hofen, M.; Bolz, I.; Hiddemann, W.; Parwaresch, R.;

Kneba, M.

CORPORATE SOURCE: 2nd Dep. Internal Med., Chemnitzstr. 33, D-24116 Kiel,

Germany

SOURCE: Leukemia (Basingstoke), (Oct., 1998) Vol. 12, No. 10, pp.

1630-1637. print.

CODEN: LEUKED. ISSN: 0887-6924.

DOCUMENT TYPE: Article LANGUAGE: English

ENTRY DATE: Entered STN: 18 Dec 1998

Last Updated on STN: 18 Dec 1998

Mantle cell lymphoma represent a clinicopathologically distinct entity of malignant non-Hodgkin's lymphoma (NHL) and are characterized by a specific chromosomal translocation t(11;14)(q13;q32) involving the cyclin D1 gene also designated as bcl-1/PRAD1 gene on chromosome 11 and the heavy chain immunoglobulin joining region on chromosome 14. We have established a PCR method to amplify t(11;14) junctional sequences in DNA from fresh frozen and paraffin-embedded tissue by bcl-1-specific primers in combination with a consensus immunoglobulin JH primer. A total of 65 cases histologically classified as mantle cell lymphoma (MCL) were analyzed for the presence of a t(11;14) translocation and monoclonal IgH-CDR3 rearrangements. From 26 patients with classical MCL and three cases with the anaplastic variant of MCL fresh frozen biopsy material was available for DNA extraction. We detected a bcl-1/JH rearrangement in 12 out of 29 samples (41%). cases paraffin-embedded lymph node tissue was the only source of DNA. In this material we found a bcl-1/JH rearrangement in six out of 31 samples with intact DNA (20%). To confirm the specificity of the PCR and to determine the bcl-1/JH junctional region sequences as clone-specific marker in individual patients we characterized the junctional DNA sequences by direct PCR sequencing in 16 cases. Interestingly we found that six bcl-1/JH junctions harbored D. segments In their N regions indicating that bcl-1/JH rearrangements can occur in a later stage of B cell ontogeny during which the complete VH to DHJH Joining or VH-replacement takes place. investigate the suitability of IgH-CDR3 as sensitive molecular marker for those MCL patients in which a t(11;14) translocation can not easily be amplified, we additionally analysed 60 cases for the presence of monoclonally rearranged IgH genes by IgH-CDR3-PCR. A monoclonal IgH-CDR3 PCR product could be identified in 24 out of 29 fresh frozen samples (79%) whereas only 11 out of 31 samples (36%) with paraffin-derived DNA were positive. We demonstrate that automated fluorescence detection of monoclonal IgH-CDR3 PCR products allows the rapid and sensitive monitoring of minimal residual disease also in cases that lack a PCR amplifiable t(11;14) translocation. In combination with allele-specific primers the procedure may improve current experimental approaches for detection of occult MCL cells at initial staging and residual disease during and after therapy.

IT Major Concepts

Molecular Genetics (Biochemistry and Molecular Biophysics); Tumor Biology

IT Diseases

mantle cell lymphoma: blood and lymphatic disease, neoplastic disease Lymphoma, Small Cleaved-Cell, Diffuse (MeSH)

IT Chemicals & Biochemicals

immunoglobulin heavy chain-CDR3

gene: rearrangement structure, tumor clonal marker; Bcl-1

gene: rearrangement structure, tumor clonal marker

L93 ANSWER 43 OF 45 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN

ACCESSION NUMBER: 1996:37446 BIOSIS DOCUMENT NUMBER: PREV199698609581

TITLE: A CD10-positive subset of malignant cells is identified in

multiple myeloma using PCR with patient-specific

immunoglobulin gene primers.

AUTHOR(S): Cao, J.; Vescio, R. A.; Rettig, M. B.; Hong, C. H.; Kim,

A.; Lee, J. C.; Lichtenstein, A. K.; Berenson, J. R.

[Reprint author]

CORPORATE SOURCE: 11-260 Factor Build., UCLA Sch. Med., 10833 Le Conte Ave.,

Los Angeles, CA 90024, USA

SOURCE: Leukemia (Basingstoke), (1995) Vol. 9, No. 11, pp.

1948-1953.

CODEN: LEUKED. ISSN: 0887-6924.

DOCUMENT TYPE: Article

LANGUAGE: English
ENTRY DATE: Entered STN: 26 Jan 1996

Last Updated on STN: 26 Jan 1996

Immunophenotypic studies show the presence of CD10-bearing malignant cells in a small subset of multiple myeloma (MM) patients. We used a sensitive PCR-based technique in order to determine the frequency that MM patients contain a malignant subpopulation which expresses this antigen. The immunoglobulin (Ig) heavy chain variable region (V-H) gene sequence expressed by the malignant clone in MM can be used as a tumor specific marker. After determining this sequence in six

MM patients, patient specific V-H oligonucleotide primers from complementarity determining region (CDR) sequences were generated. Bone marrow mononuclear cells from these patients were incubated with two different anti-CD10 antibodies or isotype identical murine IgG controls. Cells were then sorted by flow cytometry into the 1% brightest cells containing gt 99.99% CD10-positive cells and two fractions including the 90 and 10% dimmest staining cells. PCR amplification was performed on DNA from approximately 10-4 cells (0.1 mu-g) using patient specific CDR1 and CDR3 primers. Detectable PCR

product was obtained in each sorted sample although the intensity of the band was much higher in cells lacking CD10 expression (the 90 and 10% dimmest fractions) than in the CD10-bearing (1% brightest) population. These results imply that there is a small population of CD10-bearing clonal cells in most, if not all patients with MM.

IT Major Concepts

Blood and Lymphatics (Transport and Circulation); Cell Biology; Enzymology (Biochemistry and Molecular Biophysics); Genetics; Hematology (Human Medicine, Medical Sciences); Oncology (Human Medicine, Medical Sciences); Pathology

L93 ANSWER 44 OF 45 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN

ACCESSION NUMBER: 1993:209733 BIOSIS DOCUMENT NUMBER: PREV199395110958

TITLE: Primary structure of the variable regions of a monoclonal

antibody MUSE11 recognizing the tandem repeat

domain of a mucin core protein, MUC1.

AUTHOR(S): Hinoda, Yuji [Reprint author]; Arimura, Yoshiaki; Itoh,

Fumio; Adachi, Masaaki; Tsujisaki, Masayuki; Imai, Kohzoh;

Yachi, Akira

CORPORATE SOURCE: Dep. Intern. Med., Sect. 1, Sapporo Med. Coll., S-1, W-16

Chuo-ku, Sapporo 060, Japan

SOURCE: Journal of Clinical Laboratory Analysis, (1993) Vol. 7, No.

2, pp. 100-104.

CODEN: JCANEM. ISSN: 0887-8013.

DOCUMENT TYPE: Article LANGUAGE: English

ENTRY DATE: Entered STN: 23 Apr 1993

Last Updated on STN: 23 Apr 1993

AB A monoclonal antibody (MAb) MUSEll recognizes an epitope in the tandem repeat domain of a mucin core protein, MUCl. We show that the epitope of

MAb MUSE11 could be within the continuous amino acid sequence PDTRPAPG. Since there is increasing evidence indicating that this region is highly immunogenic. cDNA cloning of the variable regions of

heavy-chain (VH) and of light-chain

(VL) of MAb MUSE11 was performed by using RT-PCR to provide a basis for analyzing the structure of the antibody-antigen complex and for producing anti-idiotypic antibodies. The deduced amino acid sequence revealed that the VH and VK of MAb MUSE11 could be assigned to subgroups IIIa and II of mouse immunoqlobulin heavy and light chains,

respectively. When compared with the V regions of others MAbs in the same subgroup, the complementary determining region 3 (CDR3) in the VH region of MAb MUSE11 consisted of a unique sequence that may be important in defining the specificity of MAb MUSE11.

IT Major Concepts

Clinical Chemistry (Allied Medical Sciences); Gastroenterology (Human Medicine, Medical Sciences); Oncology (Human Medicine, Medical Sciences); Reproductive System (Reproduction)

L93 ANSWER 45 OF 45 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN

ACCESSION NUMBER: 1990:416413 BIOSIS

DOCUMENT NUMBER: PREV199090077214; BA90:77214

TITLE: DEVELOPMENT OF A HIGHLY SENSITIVE ASSAY BASED ON THE

POLYMERASE CHAIN REACTION FOR RARE B-LYMPHOCYTE CLONES IN A

POLYCLONAL POPULATION.

AUTHOR(S): BRISCO M J [Reprint author]; TAN L W; ORSBORN A M; MORLEY A

Α

CORPORATE SOURCE: DEP HAEMATOL, FLINDERS MED CENTRE, BEDFORD PARK, SOUTH

AUSTRALIA 5042

SOURCE: British Journal of Haematology, (1990) Vol. 75, No. 2, pp.

163-167.

CODEN: BJHEAL. ISSN: 0007-1048.

DOCUMENT TYPE: Article FILE SEGMENT: BA

LANGUAGE: ENGLISH

ENTRY DATE: Entered STN: 17 Sep 1990

Last Updated on STN: 17 Sep 1990

AB A method has been developed to use the polymerase chain reaction to amplify and sequence the chain determining region 3 (CDR3) of the human immunoglobulin heavy-chain gene, and to use the sequence as a marker for rare neoplastic B lymphocytes. Consensus primers for the Variable and Joining regions of the gene were constructed and shown to enable efficient amplification, directed cloning, and sequencing of CDR3. Using leukaemic cell line PFMC as a test system, CDR3 was sequenced, specific primers synthesized, and PFMC DNA was detected down to a dilution of 1:1300 in DNA from normal lymphocytes. This strategy should be useful for monitoring therapy and detecting early disease relapse in B lymphoproliferative disease.

IT Major Concepts

Blood and Lymphatics (Transport and Circulation); Cell Biology; Enzymology (Biochemistry and Molecular Biophysics); Genetics; Hematology (Human Medicine, Medical Sciences); Oncology (Human Medicine, Medical Sciences); Pathology

L94 ANSWER 1 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN ACCESSION NUMBER: 2004:934247 CAPLUS

DOCUMENT NUMBER: 141:409778

TITLE: Monoclonal antibody G250, recombinant or chimeric

antibodies and fragments for diagnosis and

treatment of cancer

INVENTOR(S): Bolhuis, Reinier L. H.; Wohl, Thorsten;

Bottger, Volker

PATENT ASSIGNEE(S): Wilex A.-G., Germany

SOURCE: U.S. Pat. Appl. Publ., 30 pp., Cont.-in-part of Appl.

No. PCT/EP02/01283.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PAT	PATENT NO.)	DATE			APPLICATION NO.					DATE			
	US 2004219633													20030807				
	WO 2002063010				A2 C2					WO 2002-EP1283					20020207			
WO :	2002 W:				A3 AM,		2003 AU,		BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,	
		,		•	•	•	DK,	•	•	•	•	•			-			
		LS,	LT,	LU,	LV,	MA,	IN, MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,	
							SE, YU,				SL,	TJ,	TM,	TN,	TR,	TT,	TZ,	
	RW:	•	•			•	MZ, TM,	•					-	-				
							NL,											
GN, GQ, GW, PRIORITY APPLN. INFO.:					ML,	MR,	NE, SN, TD, TG US 2001-266853P						P 20010207					
US 2001-327008P P 2001100 WO 2002-EP1283 A2 2002020																		

L94 ANSWER 2 OF 11 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN

ACCESSION NUMBER: 2002:437654 BIOSIS DOCUMENT NUMBER: PREV200200437654

TITLE: TCR-like human antibodies expressed on

human CTLs mediate antibody

affinity-dependent cytolytic activity.

AUTHOR(S): Chames, Patrick; Willemsen, Ralph A.; Rojas, Gertrudis;

Dieckmann, Detlef; Rem, Louise; Schuler, Gerold; Bolhuis, Reinder L.; Hoogenboom, Hennie R. [Reprint

author]

CORPORATE SOURCE: Dyax S.A., Bld du Rectorat 27B, Sart Tilman, University

Campus, Building 22, 4000, Liege 1, Belgium

hhoogenboom@dyax.com

SOURCE: Journal of Immunology, (July 15, 2002) Vol. 169, No. 2, pp.

1110-1118. print.

CODEN: JOIMA3. ISSN: 0022-1767.

DOCUMENT TYPE: Article LANGUAGE: English

ENTRY DATE: Entered STN: 14 Aug 2002

Last Updated on STN: 14 Aug 2002

L94 ANSWER 3 OF 11 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN

ACCESSION NUMBER: 1999:435925 BIOSIS DOCUMENT NUMBER: PREV199900435925

TITLE: Molecular and immunologic programming of T cell specificity

for cancer therapy.

AUTHOR(S): Bolhuis, Reinder L. H. [Reprint author]

CORPORATE SOURCE: Department of Clinical and Tumor Immunology, Daniel den

Hoed Cancer Center/Academic Hospital Rotterdam, 3008 AE,

Rotterdam, Netherlands

SOURCE: Anticancer Research, (May-June, 1999) Vol. 19, No. 3A, pp.

1998. print.

Meeting Info.: First Symposium on Local Cytokine Therapy of Cancer: Interleukin-2, Inferferon and Related Cytokines.

Hamburg, Germany. April 29-May 1, 1999.

CODEN: ANTRD4. ISSN: 0250-7005.

DOCUMENT TYPE: Conference; (Meeting)

Conference; Abstract; (Meeting Abstract)

LANGUAGE: English

ENTRY DATE: Entered STN: 18 Oct 1999

Last Updated on STN: 18 Oct 1999

L94 ANSWER 4 OF 11 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN

ACCESSION NUMBER: 1999:103415 BIOSIS DOCUMENT NUMBER: PREV199900103415

TITLE: Level of anti-mouse-antibody response induced by

bi-specific monoclonal antibody OC/TR in

ovarian-carcinoma patients is associated with longer

survival.

AUTHOR(S): Miotti, Silvia; Negri, Donatella R. M.; Valota, Olga;

Calabrese, Marcella; Bolhuis, Reinder L. H.;

Gratama, Jan W.; Colnaghi, Maria I.; Canevari, Silvana

[Reprint author]

CORPORATE SOURCE: Div. Exp. Oncol. E, Ist. Naz. Tumori Milano, 20133 Milan,

Italy

SOURCE: International Journal of Cancer, (Feb. 19, 1999) Vol. 84,

No. 1, pp. 62-68. print.

CODEN: IJCNAW. ISSN: 0020-7136.

DOCUMENT TYPE: Article LANGUAGE: English

ENTRY DATE: Entered STN: 4 Mar 1999

Last Updated on STN: 4 Mar 1999

L94 ANSWER 5 OF 11 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN

ACCESSION NUMBER: 1998:50542 BIOSIS DOCUMENT NUMBER: PREV199800050542

TITLE: Chimeric bispecific OC/TR monoclonal

antibody mediates lysis of tumor cells expressing

the folate-binding protein (MOv18) and displays decreased

immunogenicity in patients.

AUTHOR(S): Luiten, Rosalie M. [Reprint author]; Warnaar, Sven O.;

Sanborn, David; Lamers, Cornelis H. J.; Bolhuis, Reinder L. H.; Litvinov, Sergey V.; Zurawski, Vincent

R., Jr.; Coney, Leslie R.

CORPORATE SOURCE: Dep. Pathol., Univ. Leiden, University Hosp. Build. 1,

L1-Q, PO Box 9600, 2300 RC Leiden, Netherlands

SOURCE: Journal of Immunotherapy, (Nov., 1997) Vol. 20, No. 6, pp.

496-504. print.

DOCUMENT TYPE: Article LANGUAGE: English

ENTRY DATE: Entered STN: 27 Jan 1998

Last Updated on STN: 27 Jan 1998

L94 ANSWER 6 OF 11 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN

ACCESSION NUMBER: 1997:489865 BIOSIS

DOCUMENT NUMBER: PREV199799789068

TITLE: Local but no systemic immunomodulation by intraperitoneal

treatment of advanced ovarian cancer with

autologous T lymphocytes re-targeted by a bi-specific

monoclonal antibody.

AUTHOR(S): Lamers, Cor H. J.; Bolhuis, Reinder L. H.;

Warnaar, Seven O.; Stoter, Gerrit; Gratama, Jan W. [Reprint

authorl

CORPORATE SOURCE: Dep. Clin. Tumor Immunol., Daniel Hoed Cancer Cent., PO Box

5201, 3008 AE Rotterdam, Netherlands

SOURCE: International Journal of Cancer, (1997) Vol. 73, No. 2, pp.

211-219.

CODEN: IJCNAW. ISSN: 0020-7136.

DOCUMENT TYPE: Article LANGUAGE: English

ENTRY DATE: Entered STN: 7 Nov 1997

Last Updated on STN: 7 Nov 1997

L94 ANSWER 7 OF 11 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN

ACCESSION NUMBER: 1996:383107 BIOSIS DOCUMENT NUMBER: PREV199699105463

TITLE: Single chain Ig/gamma gene-redirected human T

lymphocytes produce cytokines, specifically lyse tumor

cells, and recycle lytic capacity.

AUTHOR(S): Weijtgens, Mo E. M.; Willemsen, Ralph A.; Valerio, Dinko;

Stam, Kees; Bolhuis, Reinder I. H. [Reprint

author]

CORPORATE SOURCE: Dep. Clinical Tumor Immunology, Daniel den Hoed Cancer

Cent., Groene Hilledijk 301, 3075 EA Rotterdam, Netherlands

SOURCE: Journal of Immunology, (1996) Vol. 157, No. 2, pp. 836-843.

CODEN: JOIMA3. ISSN: 0022-1767.

DOCUMENT TYPE: Article LANGUAGE: English

ENTRY DATE: Entered STN: 26 Aug 1996

Last Updated on STN: 26 Aug 1996

L94 ANSWER 8 OF 11 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN

ACCESSION NUMBER: 1995:496419 BIOSIS DOCUMENT NUMBER: PREV199598519969

TITLE: Regression of advanced ovarian carcinoma by intraperitoneal

treatment with autologous T lymphocytes retargeted by a

bispecific monoclonal antibody.

AUTHOR(S): Canevari, Silvana; Stoter, Gerrit; Arienti, Flavio; Bolis,

Giorgio; Colnaghi, Maria I.; Di Re, Emanuela M.; Eggermont, Alexander M. M.; Goey, S. Hoo; Gratama, Jan W.; Lamers, Cor H. J.; Nooy, Marianne A.; Parmiani, Giorgio; Raspagliesi, Francesco; Ravagnani, Ferdinando; Scarfone, Giovanna; Trimbos, J. Baptist; Warnaar, Sven O.; Bolhuis, Reiner

L. H.

CORPORATE SOURCE: Dep. Clinical Tumor Immunol., Rotterdam Cancer Inst., P.O.

Box 5201, 3008 AE Rotterdam, Netherlands

SOURCE: Journal of the National Cancer Institute (Bethesda), (1995)

Vol. 87, No. 19, pp. 1463-1469. CODEN: JNCIEQ. ISSN: 0027-8874.

DOCUMENT TYPE: Article LANGUAGE: English

ENTRY DATE: Entered STN: 29 Nov 1995

Last Updated on STN: 29 Nov 1995

L94 ANSWER 9 OF 11 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN

ACCESSION NUMBER: 1995:159962 BIOSIS DOCUMENT NUMBER: PREV199598174262

Inhibition of bispecific monoclonal antibody TITLE:

(bsAb) -targeted cytolysis by human anti-mouse antibodies in ovarian carcinoma patients treated

with bsAb-targeted activated T-lymphocytes.

Lamers, H. J.; Gratama, Jan W.; Warnaar, Sven O.; Stoter, AUTHOR (S):

Gerrit; Bolhuis, Reinder L. H. [Reprint author]

Dep. Med. Tumor Immunology, Daniel den Hoed Cancer Cent., CORPORATE SOURCE:

P.O. Box 5201, 3008 AE Rotterdam, The Netherlands,

netherlands

International Journal of Cancer, (1995) Vol. 60, No. 4, pp. SOURCE:

450-457.

CODEN: IJCNAW. ISSN: 0020-7136.

DOCUMENT TYPE:

Article English LANGUAGE:

Entered STN: 11 Apr 1995 ENTRY DATE:

Last Updated on STN: 11 Apr 1995

ANSWER 10 OF 11 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on L94

1994:294335 BIOSIS ACCESSION NUMBER: DOCUMENT NUMBER: PREV199497307335

TITLE: Targeted bispecific antibody-dependent cellular

cytotoxicity against renal cancer.

Bolhuis, Reinder L. H. [Reprint author]; Lamers, AUTHOR (S):

Cor [Reprint author]; Braakman, E. [Reprint author];

Stoter, Gerrit [Reprint author]; Fleuren, G. J.; Van Dijk,

J.; Warnaar, S. O.

Rotterdam Cancer Inst., Daniel den Hoed Cancer Cent., CORPORATE SOURCE:

Rotterdam, Netherlands

Klein, E. A. [Editor]; Bukowski, R. M. [Editor]; Finke, J. SOURCE:

H. [Editor]. (1993) pp. 67-76. Renal cell carcinoma:

Immunotherapy and cellular biology.

Publisher: Marcel Dekker, Inc., 270 Madison Avenue, New York, New York 10016, USA; Marcel Dekker, Inc., Basel,

Switzerland.

Meeting Info.: Second International Symposium. Cleveland,

Ohio, USA. October 1991.

ISBN: 0-8247-9033-2.

DOCUMENT TYPE: Book

> Conference; (Meeting) Book; (Book Chapter)

Conference; (Meeting Paper)

LANGUAGE: English

ENTRY DATE: Entered STN: 30 Jun 1994

Last Updated on STN: 30 Jun 1994

ANSWER 11 OF 11 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on

STN

ACCESSION NUMBER: 1993:456728 BIOSIS DOCUMENT NUMBER: PREV199396101628

Analysis of production, purification, and cytolytic TITLE:

potential of bi-specific antibodies reactive with ovarian carcinoma-associated antigens and the T-cell

antigen CD3.

AUTHOR (S): Van Ravenswaay Claasen, Hedda H. [Reprint author]; Van De

Griend, Rene J.; Mezzanzanica, Delia; Bolhuis, Reinder

L. H.; Warnaar, Sven O.; Fleuren, Gert Jan

CORPORATE SOURCE: Dep. Pathol., Univ. Leiden, PO Box 9603, 2300 RC Leiden,

The Netherlands, netherlands

International Journal of Cancer, (1993) Vol. 55, No. 1, pp. SOURCE:

128-136.

CODEN: IJCNAW. ISSN: 0020-7136.

Article DOCUMENT TYPE: LANGUAGE:

=>

English

Entered STN: 5 Oct 1993 ENTRY DATE:

Last Updated on STN: 5 Oct 1993.